

QUARTERMASTER HANDBOOK

A 445844

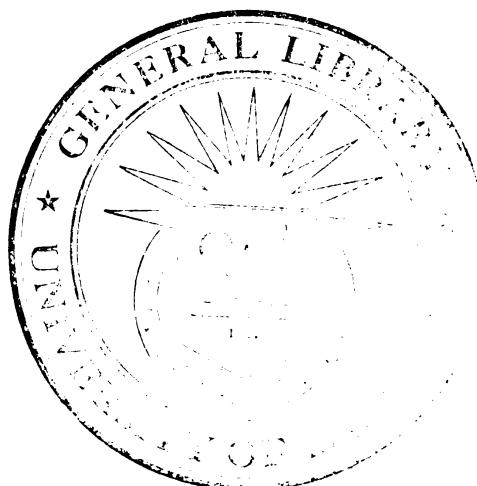


*Laundry
Company*

W.M. M. M.

**BASIC TRAINING NOTES
FOR OFFICERS
AND ENLISTED MEN**

**In Quartermaster Officer
Candidate Schools, Replace-
ment Training Centers, Unit
Training Centers, Appropri-
ate Units and Schools**



Prepared under the direction of
THE MILITARY TRAINING DIVISION
OFFICE OF THE QUARTERMASTER GENERAL
MARCH, 1943

U. S. Quartermaster General's Office.

QUARTERMASTER HANDBOOK

LAUNDRY COMPANY SEMIMOBILE

PURPOSE

This handbook is intended to provide the personnel of the quartermaster laundry company with a source of condensed information on the organization, operation, and administration of the company. There has been no attempt to make this handbook exhaustive; it must be understood that it only supplements field manuals, technical manuals, training circulars, and other official publications. Its purpose is to furnish a convenient compilation of the basic information and data necessary for the efficient functioning of the company.



TABLE OF CONTENTS

	Para.	Page
CHAPTER 1—THE FIELD LAUNDRY SERVICE		
Organization of the field laundry service	1	7
Mission of the quartermaster laundry company, semimobile	2	7
Organization of the laundry company	3	11
Productive capacity of the laundry company	4	11
CHAPTER 2—DUTIES OF PERSONNEL		
Section I.—Company Officers		
The company commander	5	13
Platoon leaders	6	14
Section II.—The Cadre		
General	7	15
The master sergeant	8	15
The first sergeant	9	15
Technical sergeants, foremen, laundry (102)	10	16
Technical sergeant, foreman, mechanic (114)	11	17
Staff sergeant, mess (824)	12	17
Staff sergeant, supply, operating (821)	13	18
Staff sergeant, supply, unit (821)	14	18
Corporal, clerk, company (405)	15	19
Cooks	16	19
Section III.—Trainees		
General	17	19
Chauffeurs (345)	18	20
Clerks, record	19	20
Electrician, general (078)	20	20
Enginemen, stationary, gasoline (081)	21	21
Firemen (084)	22	21
Folders and resizers	23	22
Machinist, general (114)	24	22
Markers (590)	25	22
Mechanics, automobile (014)	26	23
Sheet metal worker (201)	27	23
Steam fitter (163)	28	23
Washmen and tumblermen (103)	29	24
CHAPTER 3—TRAINING		
Section I.—General		
Methods	30	25
Objective	31	25
The program for unit training	32	27
The military program	33	29
Section II.—Training on Location		
The technical background	34	29
Location of operating site	35	30
Setting up the trailers	36	31
Pitching tents	37	33
Individual bundle work	38	34

	Para.	Page
Bulk work	39	34
Resizing	40	35
Starting the laundry plant	41	35
Washing ingredients	42	35
The washing process	43	36

Section III.—Mess

Company mess	44	37
Section IV.—Moral and Physical Welfare		
Religion, athletics, and recreation	45	37

CHAPTER 4—ADMINISTRATION

Section I.—Training Considerations

Present procedure	46	39
Trainees with partial or no training	47	39
Trainees with partial training	48	40

Section II.—Administrative Considerations

Orientation of the commanding officer	49	41
Initial personnel rosters and change cards	50	42
Other administrative records	51	42
Administrative forms required	52	43
Reference to appendix on administration	53	43

Section III.—Initial Property Considerations

Individual clothing and equipment	54	44
Other Items of T/BA property	55	44
Table of allowances of post property	56	45
Replenishment of property	57	45

Section IV.—Company Property Records

The company property book	58	48
Individual clothing and equipment records	59	48
Records of post property	60	49
Reports covering property lost, worn, damaged or destroyed	61	49

CHAPTER 5—OVERSEAS MOVEMENTS

Section I.—Preparing to Leave Home Station

Initial procedure	62	51
Records	63	52
Lists and rosters	64	54
Reports	65	56
Disposition of unnecessary files	66	56
Preparation and delivery of equipment for transport shipment	67	57
Baggage considerations	68	58
Equipment to accompany troops	69	58

Section II.—Movement by Motor Convoy

General	70	59
Report to port commander	71	59
Technical considerations	72	60
Supply—the vital consideration	73	60
Scope of cash payments	74	60
Bivouacs	75	61

	Para.	Page
Section III.—Movement by Rail		
General	76	61
Report to port commander	77	61
Request for railroad facilities	78	62
Report required for separate freight shipments	79	62
Transportation requests (AR 55-110)	80	62
Bill of lading	81	63
Entrainig	82	63
Special considerations on troop movement	83	64
Detraining	84	64

Section IV.—Combination Convoy and Rail Movement

General	85	65
-------------------	----	----

Section V.—Arrival at Port of Embarkation

Immediate considerations	86	65
Special embarkation considerations	87	66
Condition of motor vehicles on arrival at the port	88	66

Section VI.—On Board the Transport

Miscellaneous considerations on boarding the ship	89	67
Command responsibilities aboard transports	90	67

Section VII.—Arrival at Port of Debarkation

Debarking	91	67
Fatigue details	92	68

CHAPTER 6—LAUNDRY EQUIPMENT

Section I.—General

Company equipment	93	69
Section equipment	94	70

Section II.—The Laundry Trailer

General description	95	70
The fifth wheel	96	73
The landing gear	97	73
The stand-jacks	98	73
The laundry equipment	99	73
The boiler	100	75
The engine-generator set	101	78
The hot water heater	102	78
The water supply pumps	103	78
The washer	104	80
The extractor	105	80
The dry tumblers	106	81
Miscellaneous parts	107	83

Section III.—Equipment—The Tractor-Truck

General description	108	83
Operation, maintenance, and parts	109	84

**CHAPTER 7—THE FIELD LAUNDRY SERVICE
IN THE THEATER OF OPERATIONS**

Section I.—Methods of Employment

General	110	85
-------------------	-----	----

	Para.	Page
Assigned to a field hospital	111	86
Assigned to a task force	112	86
Operating in conjunction with a sterilization unit	113	87
Operating as an organic part of a salvage repair battalion	114	87

Section II.—Miscellaneous considerations

Peculiar problems in the field	115	90
Security and camouflage	116	92
Demolition	117	92

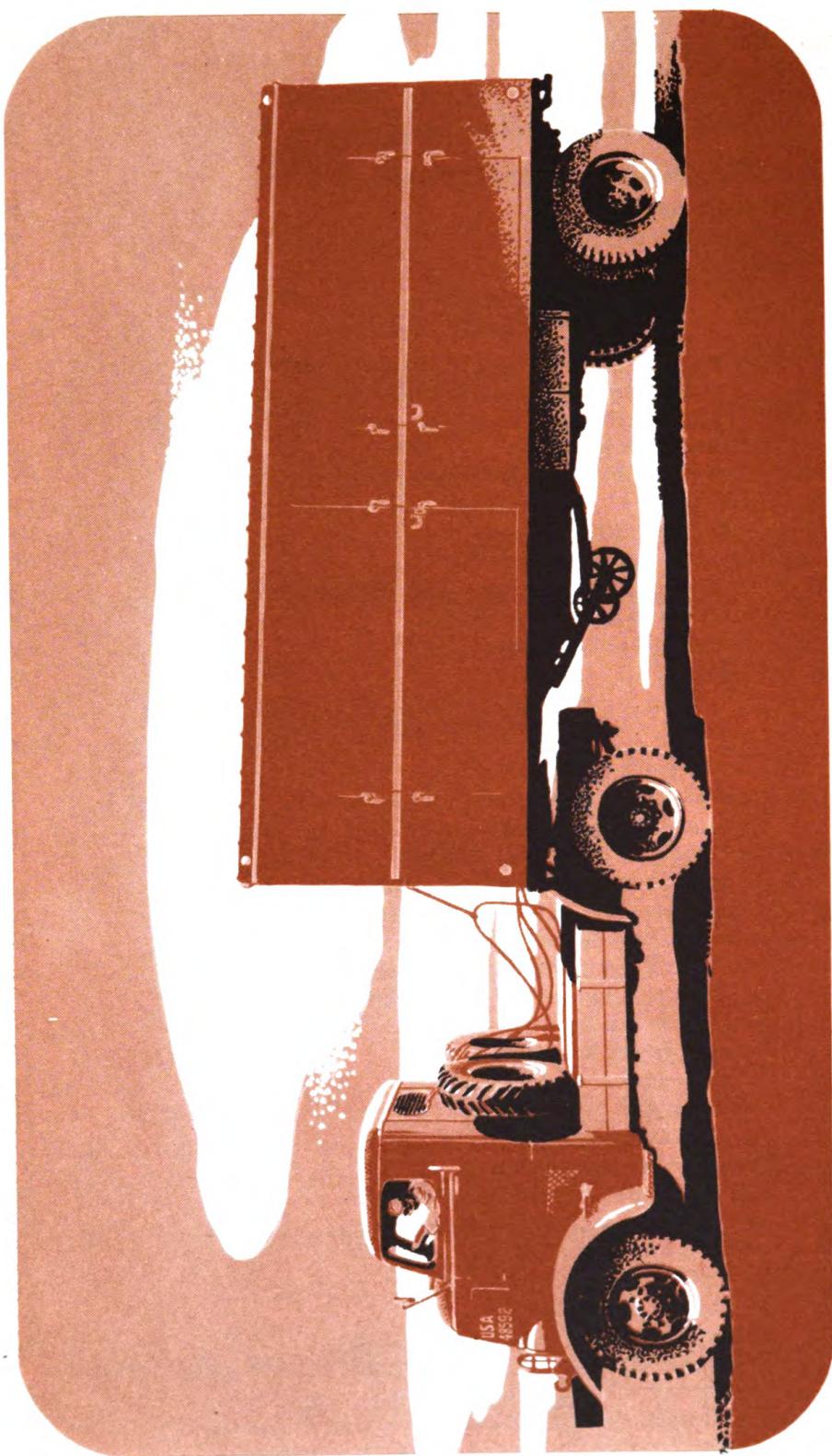
APPENDICES

	Page
Appendix A—Check list for training inspection of quartermaster laundry company, semimobile, prior to overseas movement	93
Appendix B—Quartermaster laundry company, semimobile, inspection	97
Appendix C—Spare parts and tools	102
Appendix D—Estimate of three months' operating supplies	104
Appendix E—Resizing	105
Appendix F—Administration	109
Appendix G—Quartermaster equipment chart	120
Appendix H—Suggested form for laundry lubrication record	124
Appendix I—Check lists for foreign duty	125
Appendix J—Sample training progress chart	130
Appendix K—Glossary	132

ILLUSTRATIONS

	Page
Figure 1—C. O. E. truck-trailer unit	6
Figure 2—Organization of quartermaster laundry company, semimobile	8
Figure 3—Functional chart	10
Figure 4—The laundry trailer (Troy Model)	12
Figure 5—The boiler-condensate return system	12
Figure 6—Training program, first thirteen weeks	26
Figure 7—Training program, second thirteen weeks	28
Figure 8—Plan for full use of stream by troops	30
Figure 9—Suggested arrangement of laundry installation	33
Figure 10—The laundry trailer	70
Figure 11—Typical laundry trailer floor plan	74
Figure 12—The engine-generator set	76
Figure 13—Gasoline pump setup	76
Figure 14—The hot water heater	77
Figure 15—The boiler exhaust system	77
Figure 16—Electric pump and spare parts chest	79
Figure 17—Low water cut-off and feed water pump	81
Figure 18—Extractor and drain tub	82
Figure 19—Dry tumblers	82
Figure 20—Dry tumbler (inside)	83
Figure 21—Autocar Model U-7144-T tractor-truck	84
Figure 22—Flow of salvage through operating unit of quartermaster salvage repair battalion, semimobile	88
Figure 23—Flow of work through sterilization-laundry installation	89
Figure 24—Quartermaster salvage repair battalion, semimobile	91

CAB OVER ENGINE TRACTOR TRAILER UNIT
FIGURE 1



CHAPTER 1

THE FIELD LAUNDRY SERVICE



1. ORGANIZATION OF THE FIELD LAUNDRY SERVICE.

This service is organized so that its laundry units may perform their work alone or in conjunction with other elements, as follows:

- a.** As separate laundry companies (or at times, even as separate laundry platoons) working alone, or in conjunction with sterilization or salvage repair units of a similar productive capacity. It will ordinarily be administered and controlled by army headquarters or GHQ, although other attachment of companies or separate platoons is possible. These arrangements will be discussed in more detail in Chapter 7. (See company T/O, figure 2.)
- b.** As separate laundry battalions functioning in the zone of the interior, and organized for training purposes. (See T/O 10-165, April 1, 1942.) These training units furnish cadres for newly activated companies and make available replacements for the overseas Field Laundry Service.
- c.** As a single laundry company combined with a quartermaster sterilization company (T/O 10-177, April 1, 1942) and a salvage repair company (T/O 10-237, April 1, 1942). The three comprise a salvage repair battalion, semimobile (T/O 10-236, April 1, 1942), which renovates and repairs salvage material.

2. MISSION OF THE QUARTERMASTER LAUNDRY COMPANY, SEMIMOBILE.

This company is a unit designed to provide essential laundry service for personnel and installations of the Army in the theater of operations where the usual fixed post laundry service cannot be provided. The company organization and equipment are flexible enough to function in any of the following four ways:

**ORGANIZATION OF THE
QUARTERMASTER LAUNDRY COMPANY,
SEMIMOBILE**

1	2	3	4	5	6	7	8	9	
Unit	Technician grade	Company headquarters						Enlisted cadre	Remarks
		Platoon headquarters	2 sections (each)	Total platoon	4 platoons (each)				
2 Captain.....	1				1				
3 First lieutenant }.....	1				1			2	
4 Second lieutenant }.....	1				1			2	
5 Total commissioned.....	1	1	1	5					
6 Master sergeant, including.....	1				1				
7 Superintendent (102).....	(1)				(1)	(1)			
8 First sergeant (585).....									
9 Technical sergeant, including.....	1	1	1	5					
10 Foreman, laundry (102).....		(1)	(1)	(1)	(4)	(4)			
11 Foreman, mechanic (114).....		(1)			(1)	(1)			
12 Staff sergeant, including.....	3	1	1	3	15	3			
13 Foreman, laundry assistant (102).....			(1)	(2)	(8)				
14 Foreman, mechanic assistant (121).....			(1)	(1)	(4)				
15 Mess (824).....		(1)			(1)	(1)			
16 Supply, operating (821).....		(1)			(1)	(1)			
17 Supply, unit (821).....		(1)			(1)	(1)			
18 Sergeant, including.....			1	1	4				
19 Supply, operating (821).....		(1)		(1)	(4)				
20 Corporal, including.....		1		1	2	9			
21 Clerk, company (405).....		(1)			(1)	(1)			
22 Foreman, laundry assistant (102).....			(1)	(2)	(8)				
23 Technician, grade 4 } including.....	20	4	28	60	15				
24 Technician, grade 5 } including.....									
25 Private, first class } including.....					74				
26 Private.....					99				
27 Chauffeur (345).....		(2)	(1)		(1)	(6)			
28 Clerk, record (405).....	5	(1)	(1)		(1)	(5)			
29 Clerk, record (055).....				(1)	(2)	(8)			
30 Cook (060).....	4	(3)			(3)	(1)			
31 Cook (060).....	5	(2)			(2)	(1)			
32 Cook's helper (521).....		(4)			(4)				
33 Electrician, general (078).....	4	(1)			(1)				
34 Engineman, stationary, gasoline (081).....	4			(1)	(2)	(8)			
35 Engineman, stationary, gasoline (081).....	5			(1)	(2)	(8)			
36 Fireman (084).....	5		(2)	(4)	(16)				
37 Folder and resizer (590).....				(4)	(8)	(32)			
38 Laborer (590).....				(4)	(8)	(32)			
39 Machinist, general (114).....	4	(1)			(1)				
40 Marker (590).....				(4)	(8)	(32)			
41 Mechanic, automobile (014).....	4	(1)			(1)				
42 Mechanic, automobile (014).....	5	(1)			(1)				
43 Mechanic, general (121).....	5		(1)		(1)	(4)			
44 Orderly (695).....			(1)			(1)			
45 Sheet metal worker (201).....	4	(1)			(1)				
46 Steam fitter (163).....		5		(1)		(1)	(4)		
47 Tumblerman (103).....		5			(2)	(4)	(16)		
48 Tumblerman (103).....					(2)	(4)	(16)		
49 Washman (103).....		5			(2)	(4)	(16)		

FIGURE 2

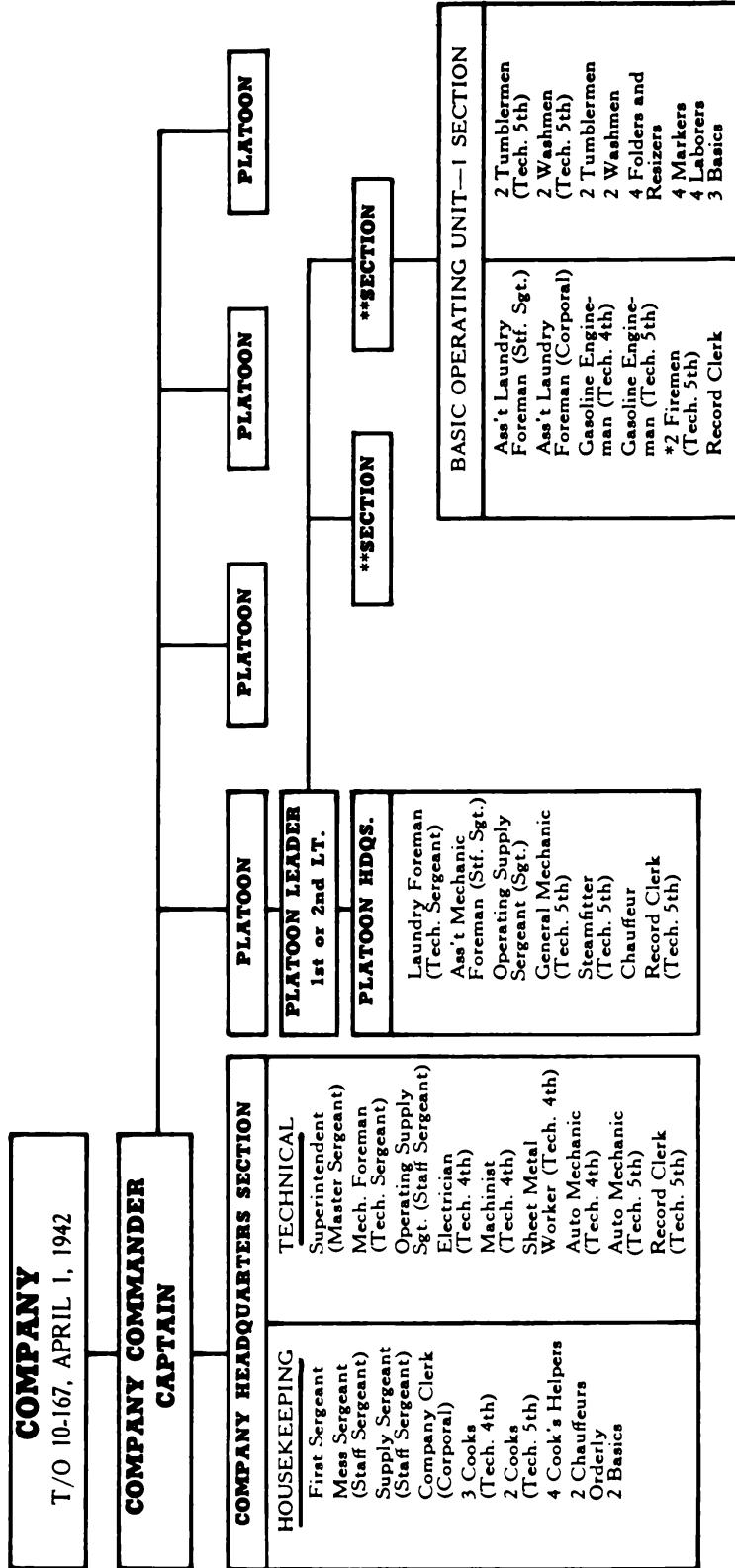
**ORGANIZATION OF THE
QUARTERMASTER LAUNDRY COMPANY,
SEMIMOBILE—(Continued)**

1	2	3	4	5	6	7	8	9
I	Unit	Technician grade	Company headquarters	4 platoons (each)				
			Platoon head- quarters	2 sections (each)				
				Total platoon				
					Total company			
						Enlisted cadre		
							Remarks	
50	Private—Continued							
51	Washman (103).....		(2)	(4)	(16).....			
51	Basic (521).....	(2)	(3)	(6)	(26).....			
52	Total enlisted.....	27	7	30	67	295	13	
53	Aggregate.....	28	8	30	68	300	13	
54	O Carbine, cal. .30.....	21	7	22	51	225	.....
55	O Rifle, cal. .30.....	7	1	8	17	75	.....
56	Q Semitrailer, 2-wheel, van type, laundry.....			2	4	16	.....
57	Q Trailer, 1-ton, 2-wheel, cargo.....		1	1	1	5	.....
58	Q Truck, 1/4-ton.....					1	.....
59	QQQ Truck, 3/4-ton, weapon carrier.....	b				1	.....
60	QQQ Truck, 2 1/2-ton, cargo.....		1	1	1	5	.....
61	QQQ Truck, 4- to 5-ton, tractor.....			2	4	16	.....

FIGURE 2 (Continued)

- a.** As a laundry providing bundle service for limited numbers of troops in the field, but not actively engaged in combat. Bundle service is not practicable where service to a maximum number of troops is essential.
- b.** As a unit providing laundry service for Medical Corps installations.
- c.** As an organization serving troops in the theater of operations where laundry service for a maximum number of troops is imperative. In this case, the laundry company operates in conjunction with a sterilization company to provide baths and clean uniforms for troops assembled in rest areas.
- d.** As a company operating as a unit of a salvage repair battalion which engages in the work of putting into a serviceable condition the repairable salvage received from salvage collecting organizations and other sources.

QUARTERMASTER LAUNDRY COMPANY, SEMIMOBILE



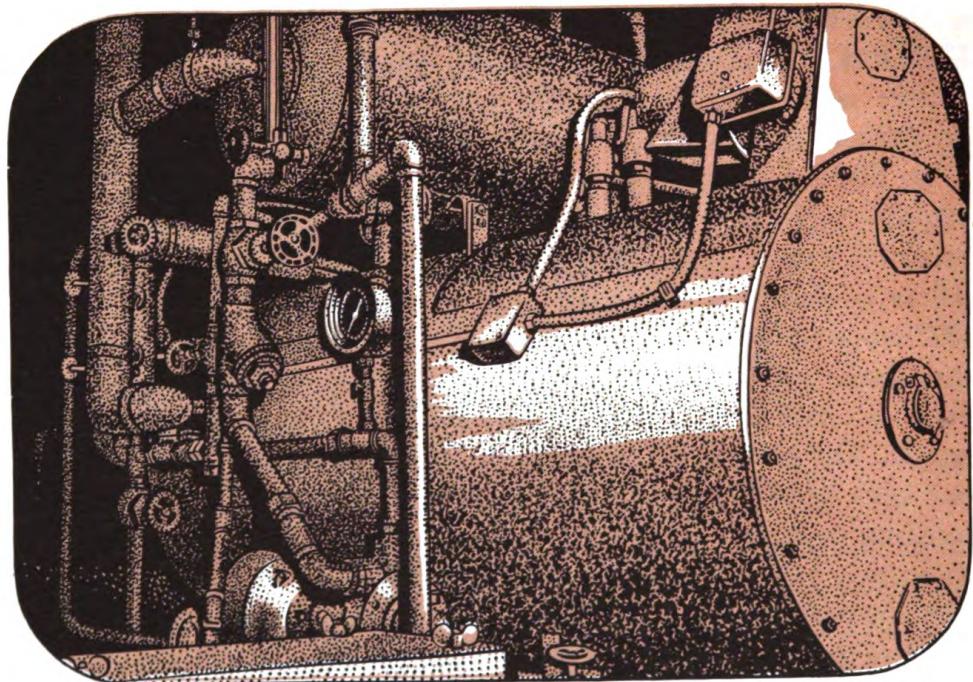
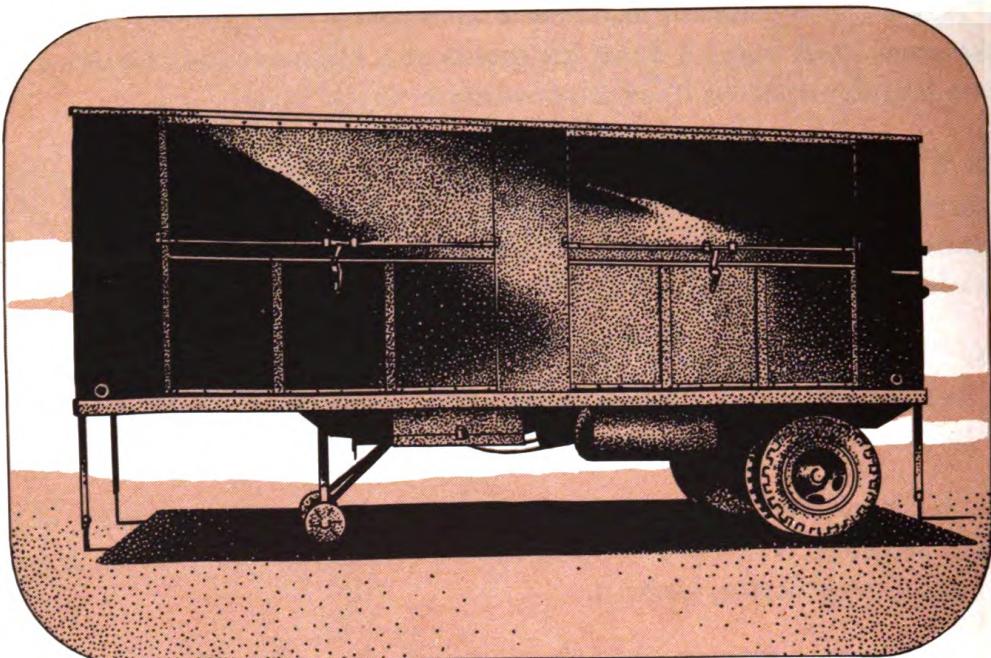
3. ORGANIZATION OF THE LAUNDRY COMPANY.

COMPANY. The company consists of a company headquarters and four platoons, each platoon being composed of a platoon headquarters and two laundry sections. (See organizational chart, figure 3.)

- a.** Company headquarters consists of one captain (the company commander), a master sergeant, a first sergeant, and a technical sergeant, 3 staff sergeants, a corporal, and 20 others, including technicians, grades 4 and 5, privates first class, and privates.
- b.** Platoon headquarters is made up of one first or second lieutenant, a technical sergeant, a staff sergeant, a sergeant, and 4 others, including 3 technicians, grade 5, and 1 private, first class, or private.
- c.** Each of the two sections of the four platoons is composed of a staff sergeant, a corporal, and 28 others, including 1 technician, grade 4, and 7 technicians, grade 5.
- d.** Altogether, the company has a complement of 5 officers and 295 enlisted men.

4. PRODUCTIVE CAPACITY OF THE LAUNDRY COMPANY.

A semimobile laundry company is designed to provide laundry service for 48,000 field troops weekly when operating on two 8-hour shifts a day, 7 days a week. Three 8-hour shifts or two 10- to 12-hour shifts may be instituted when necessary. The laundry company table of organization, however, is designed to provide personnel for only 2 shifts. A section of the company running 2 laundry trailers is the basic operating unit, can provide laundry service for 6,000 troops in the two 8-hour shifts, 7 days per week basis. On the same basis the platoon has a weekly capacity of 12,000 troops. The above estimate is based on an average bundle weight per man of 5 pounds. The production rate for the section is about 250 pounds an hour, and for the company 2,000 pounds. It is important to know the operating capacity in units of pounds where the laundry from field hospitals or from salvage installations is received by number of pieces or by the pound, in order to determine the ability of a laundry unit to process a given amount of work in a specified time. Laundry foremen and officers should be able to convert work received by the piece from these sources to a poundage basis by inspection.



CHAPTER 2

DUTIES OF PERSONNEL

	Paragraphs
Section I. Company officers	5-6
Section II. The cadre	7-16
Section III. Trainees	17-29



SECTION I — COMPANY OFFICERS

5. THE COMPANY COMMANDER. **a.** The commanding officer of a quartermaster laundry company, semimobile, alone is responsible for the administrative and technical supervision of his company. He is responsible for the supply, care, and preservation of materials and equipment used by the unit, and for the proper and efficient operation of the several semimobile laundry plants. Most important, however, he is responsible for the training and guidance of personnel under him. To that end, he should delegate many of his routine administrative responsibilities to his junior officers and non-commissioned officers. These men should be so well trained and reliable that they can satisfactorily carry on the work of the company even in the commander's absence. The company commander should bear in mind that the efficiency, appearance, and discipline of his company is a direct reflection of his own ability, ingenuity, and resourcefulness.

b. The commanding officer should spend a minimum of time on the paper work of the company. The larger portion of his day, especially

during the company's initial training period, should be spent in directly supervising training. In the field, his major concern should be the supervising of the activities of the various sections and platoons of his organization.

c. The commanding officer of a laundry company should be well informed on the trends of modern warfare; he should have some knowledge of military tactics; he should be able to instruct his men in the use of weapons and camouflage and in methods of demolition and the establishment of local security. When his company arrives in the theater of operations, it may be subjected at any time to an enemy attack. Therefore its training should be directed toward the minimizing of losses of both men and equipment. The commander should be capable of formulating sound tactical plans for all possible situations in the combat zone, and should be able to instruct his men in the execution of his plans. He must be able to plan for evacuating his unit with equipment intact if possible, but if not, at least with his men. He must plan to destroy his equipment before abandoning it. (See paragraph 117 on demolition.)

d. Fundamentally, the main job of the commanding officer of a laundry company is getting clothes washed. Therefore, he should have had considerable experience in military or commercial laundries. In short, the commanding officer of a laundry company should possess most of the qualifications of a line officer plus technical knowledge on the subject of laundry operations.

6. PLATOON LEADERS. The four platoon leaders of the company should have the potential abilities of a company commander, for they will take over command of the company in order of seniority in his absence. They are responsible to the company commander for the basic and technical training of the personnel of their platoons. They are at all times assistants to the commanding officer, and in garrison should be required to assist in the performance of all company duties, including the keeping of records, returns, estimates, and requisitions. They are responsible for the maintenance of equipment assigned to the platoons and for keeping on hand adequate stocks of operating supplies. They are responsible for the efficient and maximum operation of the laundry plants assigned to their respective platoons. There will be many times in the field when a laundry platoon may be detached from its parent organization for periods of days, weeks, or months. When so disposed, the platoon leader assumes the role, for all practical intents and purposes, of a company commander.

SECTION II — THE CADRE

7. GENERAL. An officer activating a semimobile laundry company must look to his cadremen (see column 8, Figure 2) for assistance in organizing and training his new company. Lacking fully trained cadremen, he will be required to pick out and train the most likely personnel and put them in key positions. The cadremen should have the qualifications specified in the following paragraphs. In general they will be employed as directed therein, but rigid adherence to these instructions will not be possible, practicable, nor desirable under all circumstances.

8. THE MASTER SERGEANT. The master sergeant should be a man of long experience in laundry operations, but he need not necessarily have had experience with field laundry units. In lieu of field service he should have had experience in directing employees and in supervising all operations of a modern laundry. He must understand and be able to supervise the procurement of all laundry supplies, the preparation of bleaches, soaps, starches, bluing, sours, and cleaning fluids. He should be familiar with modern power-operated machinery. He should know how to get maximum results with a minimum of stress upon both personnel and machines. Above all, he must be able to teach and lead others. His position in relation to the company as a whole will be supervisor of all technical operations. He conducts the technical affairs of the company from company headquarters. In the field, however, it will be necessary for this man, where the situation permits, to divide the major part of his time among the various operating units.

9. THE FIRST SERGEANT. The first sergeant is the company commander's administrative assistant. He should be "the strong, right arm" of the company commander. Whereas the company officers and the master sergeant are primarily supervisors of operational and technical processes, the duties of the first sergeant are principally administrative. In such matters, he is the contact man between the company commander and enlisted men. His usual garrison duties include forming the company or detachments thereof for drill, fatigue, guard and other military formations. He keeps company personnel rosters, the Morning Report, the Sick Book and other routine records. He makes notes of violations of orders, and transmits the company commander's instructions to the enlisted men. In addition to having a good working knowledge of military administration (see TM 12-250

for general administrative duties of the first sergeant), he must be resourceful and reliable. Often, in the field, this man will have to act as a liaison officer and carry administrative and tactical instructions to the scattered platoons and sections, and even to the junior officers of the company. In addition to the accepted prerequisites of "a first sergeant of the line," *it is very important* that this man have outstanding administrative qualifications. (See also paragraph 115 on Peculiar Problems in the Field.) His administrative responsibilities will require a first-hand knowledge of pertinent Army Regulations (especially large portions of the 345 and 615 series, and parts of the 35 series). He should be familiar with the contents of AR 1-6, 1-10, FM 21-6, and TM 12-250. By referring to AR 310-100, 310-105, and 310-200, he can learn how to use and prepare AGO forms. He should also consult OQMG Circular 1-17 for titles and numbers of Standard and War Department forms required for quartermaster activities and all finance and quartermaster forms.

10. TECHNICAL SERGEANTS, FOREMEN, LAUNDRY (102).

a. These four technical sergeants should have the same general qualifications as the master sergeant (see paragraph 8 above). Through these laundry foremen the master sergeant will issue his technical instructions. The foremen, in turn, will superintend the washing of clothes in their respective platoons. They should be men with considerable laundry experience, but if such men are not available, substitutes should be selected on the basis of their estimated ability to learn a job by doing it and on the basis of their previous mechanical experience in other fields, and on their apparent mechanical tendencies. In any case, they will be guided by the experience and training of the master sergeant.

b. Aside from their technical qualifications, these sergeants should also qualify as potential first sergeants. When platoons and individual sections operate independently and at some distance from the company headquarters, the platoon leaders and technical sergeants will have to assume the commanding officer-first sergeant relationship to one another. (See paragraph 115.)

c. Eight potential staff sergeants will be selected from the trainees when they arrive. They will act as assistant laundry foremen directly in charge of laundry operations of each section. In addition, eight corporals are authorized and will work directly under these staff sergeants and will have the same general duties. Ordinarily, they will be in charge of the second shift. The chain of functional command, therefore, will

be from the master sergeant at company headquarters through the technical sergeants at platoon headquarters to the staff sergeants and corporals directly superintending work carried on by the sections.

11. TECHNICAL SERGEANT, FOREMAN, MECHANIC (114). **a.** This sergeant should be qualified as a mechanician, general (121) rather than as a machinist or mechanic (114). Specifications are to be found in AR 615-26. In general, he will be responsible for the care and maintenance of the boiler, 15 h. p., oil-fired, the gasoline engines, the generator, the water pumps, the washer, the extractor, the dry tumblers, other mechanical parts, and general plumbing. He must have considerable mechanical ability and be familiar with the tools of several trades.

b. The four assistant mechanic foremen (staff sergeants), the general mechanician, the general machinist, the sheet metal worker, and the steam-fitter (plumber) work under the general supervision of this technical sergeant. This sergeant will also direct all mechanical training within the company. It is imperative, therefore, that he know the mechanics of all semimobile laundry machinery thoroughly and, to a reasonable degree, automotive mechanics also. He should be able to make immediate on-the-spot repairs and be able to order, by proper nomenclature and number, spare and replacement parts for the laundry machines.

c. In addition to the assistant mechanic foremen (staff sergeants) mentioned in (b) above, there are four technicians, 5th grade, listed as general mechanics in the table of organization. They will act as assistants to the former within the platoon, and all will be employed as directed by the technical sergeant. But it is recommended that the staff sergeant spend most of his time with one section, while the technician works with the other. These eight men are not a part of the cadre, but reference is made to them at this point because their duties and qualifications are similar to those of the mechanic foreman.

12. STAFF SERGEANT, MESS (824). The mess sergeant is in immediate charge of the company mess. He has complete control of the kitchen and, in garrison, of the mess hall under the supervision of the company commander. When a mess officer has been appointed, however, the mess sergeant will function under his general direction. (See TM 12-250 for a complete resume of the duties of the company mess sergeant.) In garrison and during training periods where the company units are set up in close proximity to one another, it will be possible to mess the company as a unit. Under field conditions, however, it is often impossible to feed all the men of the company

at one central point. It will be necessary, therefore, when the company is deployed as separate operating crews in the field, to provide separate messes for the various platoons or to have the several units attached to other organizations for mess facilities. Under the latter arrangement, it may be necessary to assign the mess sergeant to other duties. As a mess sergeant, this noncommissioned officer should be thoroughly familiar with the publications listed in paragraph 44 on company mess.

13. STAFF SERGEANT, SUPPLY, OPERATING (821).

This staff sergeant specialist should be responsible for procurement and transportation of all operating supplies, such as detergents, sours, gasoline, fuel-oil, oil, and other items necessary for the efficient operation of the laundry plants and the process of washing clothes. He must be able to estimate daily requirements and requisition operating supplies in sufficient quantity far enough in advance so that they will be available when they are needed. On the other hand, he must maintain a level of supply low enough so that transportation does not become a burden to the company's movements. He should maintain a running inventory of supplies and be able intelligently to prepare operations reports when they are required. Supply records can be conveniently kept on WD QMC Form No. 422, Stock Record Card (see appendix D for a three months' estimate of operating supplies). Upon arrival of the trainees, four men will be selected as assistants to the supply sergeant, and will be placed in charge of operating supplies for each platoon.

14. STAFF SERGEANT, SUPPLY, UNIT (821).

a. The supply sergeant is the enlisted assistant to the company supply officer. Normally, the company commander will designate a junior officer as the company supply officer who will be responsible for the supervision of all supply activities except subsistence. Under this officer the supply sergeant must provide for the orderly storage, safe-keeping, care, and preservation of equipment and supplies. He will maintain adequate records of property received and property issued to the individuals of the command. In conformity with Army Regulations, he must keep the prescribed records of issues of individual clothing and equipment. He will post to the Company Property Book if so directed by the company supply officer. He will make frequent inventories of property. When a change of location is ordered, he will be responsible for the loading and moving of equipment and supplies. (For a complete resume of the supply sergeant's duties, see TM 12-250.)

b. The problem of this supply sergeant will be to maintain an adequately equipped company when it is deployed as platoons or sections

at points distant from the company headquarters. In such instances, assistant supply sergeants may have to be appointed to serve the individual platoons. Normal procedure in such a case, however, will direct the attachment of the detached unit to another organization. Where all the component parts of the company may be so attached, the supply sergeant will be assigned additional duties. (See paragraph 115.)

15. CORPORAL, CLERK, COMPANY (405). This noncommissioned officer should be a good typist, and should be thoroughly familiar with company administrative procedure. He should also be well acquainted with all military administrative forms. (See TM 12-250 for a more detailed treatment of the company clerk's duties.) In the laundry company the commander should direct the record clerks to act as part-time assistants to the company clerk in order that they also may learn military administration. The record clerks, designated as (405) and (055), especially during the period of unit training, should learn company administration. (See paragraphs 115 and 49 for a further study of disposition of clerks and paragraph 19 on the record clerks.)

16. COOKS. These men work under the supervision of the mess sergeant. The table of organization authorizes five cooks and four cooks' helpers in order to provide trained men to operate separate messes or serve as assistant cooks in other messes when the platoons are functioning in the field. The two technicians, 4th and 5th grade, listed in the column marked "cadre" should have been trained before reporting for duty, but the others and the cooks' helpers will be trained after joining the company, and at a cooks' and bakers' school, if possible, after the company is activated. All kitchen personnel should be thoroughly familiar with the publications listed in paragraph 44.

SECTION III — TRAINEES

17. GENERAL. Trainees will report to the newly activated company direct from the reception centers. Each will report for duty with a different degree of training and background. From this group the new commanding officer must mold his organization. This formative stage will tax his powers of ingenuity and resourcefulness to the utmost. The assistant laundry foremen (see paragraph 10), the assistant mechanic, foremen, and the general mechanics (see paragraph 11), the operating supply sergeants (see paragraph 13), and the cooks and cooks' helpers (see paragraph 16), have been treated in the paragraphs indicated.

18. CHAUFFEURS (345). These men are chauffeurs for the $\frac{1}{4}$ - and $\frac{3}{4}$ -ton trucks and the $2\frac{1}{2}$ -ton cargo trucks assigned to company headquarters, and for the $2\frac{1}{2}$ -ton truck assigned to each platoon. If the men assigned to $2\frac{1}{2}$ -ton trucks have had experience in driving commercial tractors or heavy trucks, they will require little additional training. On the other hand, if they have not had such experience, a considerable portion of the technical training period must be spent in driving instruction. These drivers will also be trained in 2d echelon maintenance. They should be familiar enough with motor vehicle operation to make simple and 2d echelon repairs. They must be impressed with the fact that the care of their vehicles should always be a foremost consideration. They should be thoroughly familiar with the following publications:

- a.** Motor Transport School Text No. 15, Echelon System of Maintenance (TM 10-525).
- b.** TM 9-2810, Motor Vehicle Inspections and Preventative Maintenance Servicing.
- c.** TM 10-1401, Maintenance Manual, GMC $1\frac{1}{2}$ -ton 4 x 4.
- d.** Motor Transport School Text No. 16, Military Motor Transportation.
- e.** TM 10-460, Driver's Manual.
- f.** Manufacturers' maintenance manuals and parts lists.

19. CLERKS, RECORD. Five of these clerks are technicians, 5th grade. In general, they should possess the same qualifications as the company clerk. The eight record clerks listed as (055) in the table of organization are unrated, and need not be typists, though such training is desirable. As a group, the record clerks are charged with the preparation and custody of technical records and operational reports for the sections, platoon headquarters, and company headquarters. But they may be given other clerical duties that do not interfere with their regular work.

20. ELECTRICIAN, GENERAL (078). This man is a technician, 4th grade. He should be capable of laying out and assembling, installing and testing electrical fixtures, apparatus, control equipment and wiring. He should be able to fasten panel boards, switch boxes, pull boxes, and other concealed or recessed equipment to the frame of a structure such as the laundry trailers. He should be able to

test circuits for continuity and proper connections. He is responsible for the proper care and maintenance of the electrical parts of the generators, and for all motors with which the plants are equipped. He is responsible for the care and preservation of the batteries and all other electrical parts connected thereto. There is only one electrician provided for the laundry company, the electrical work for which may at times be very extensive. Since the various operating platoons may often be widely separated, the company commander should have this specialist train others to make minor electrical repairs in his absence. Instruction of these "assistant electricians" may well be started at the inception of the company.

21. ENGINEMEN, STATIONARY, GASOLINE (081).

Eight of the enginemen are technicians, 4th grade, and eight technicians, 5th grade. Two of each grade will be assigned to a platoon. Their duties, in general, will be the operation and maintenance of the mobile and light stationary engines used for generating power and pumping water for the trailer units. One man will be assigned to each trailer; or when the unit is working on shifts, one engineman will be available for tending two trailers during each shift.

22. FIREMEN (084). There are sixteen firemen in the quartermaster laundry company, semimobile.

a. Duties as firemen. It will be the responsibility of these specialists to operate, blow-down, clean, and, in general, keep in good condition the water-tube and the stationary boiler installed in each trailer. They must be able to refuel, lubricate, and fire the oil-burner unit which provides heat for the boiler assembly. Each working day, they must be on the job early enough to fire up so that a sufficient head of steam and plenty of hot water are ready to operate the trailer by the time the main detachment arrives.

b. Duties as prime-mover chauffeurs. In addition to their duties as firemen, these men are chauffeurs for the prime-movers. At the beginning of the company training, cognizance must be taken of each man's experience and training in the operation of Army or commercial tractors and heavy trucks. An untrained man will require much training to become a proficient prime-mover operator. These men will be instructed during the technical training period in 2d echelon mechanics. All drivers must be impressed with the fact that proper care of their vehicles is their foremost responsibility. (See paragraph 18.)

23. FOLDERS AND RESIZERS. A total of 32 men in the quartermaster laundry company, semimobile, are engaged in folding and resizing. Of this number, four are allotted to each section. Under normal operating conditions, two of them will work each shift. They receive the washed material from the laundry trailers, and sort, resize, and bundle the articles in such a manner as circumstances may dictate. For example, laundry work for a hospital unit will not ordinarily require resizing, and work to be passed on to a salvage repair installation will be resized by the repair unit. (See appendix E for resizing chart and instructions). These men will receive technical training in laundry operations.

24. MACHINIST, GENERAL (114). This man is rated as a technician, 4th grade. He will set up his shop at company headquarters and, in general, will do machinist work required by the various operating units. He should be able to operate all types of machine tools, including lathes, milling machines, planes, and shapers, and to use all machinist hand tools, such as scrapers, chisels, and files. He should understand the working properties of all metals, especially wrought iron and various steels. The enlisted man assigned to this position may expect considerable work when his unit actually sets up for operation in the combat zone where replacement parts may at times be difficult to obtain. There is only one set of machinist's tools authorized for each laundry company; therefore, the machinist will establish his shop at company headquarters and make his services available to as many of the deployed units as possible. Alternates for this position are desirable; for, since the work requires a considerable degree of skill, an untrained man would have difficulty in carrying on in the machinist's absence.

25. MARKERS (590). There are 32 markers in the laundry company, four to a section and eight to a platoon. These men will mark, classify (see paragraph 38 for an explanation of this process) and sort clothing when bundle work is being performed. When the unit is not operating on an individual bundle basis, their work will consist mainly of receiving and sorting clothing. Two of these men working together with the folders and resizers will normally comprise one operating shift, and will perform the bulk of the work carried on in the marking and sorting tent.

26. MECHANICS, AUTOMOBILE (014). The laundry company has two mechanics, automobile. One is a technician, 5th, and one a technician, 4th grade. Ordinarily, company headquarters will be used as a base for their operations, although at times they will be required to service the tractors and other organic motor vehicles on location. In other words, they will be subject to call by any of the various operating sections or platoons. They have available for transportation, a 3/4-ton weapon carrier. These mechanics will be trained in 3d and 4th echelon repair work. They will perform 2d echelon maintenance where other facilities for such work are not available. They will not normally make 3d and 4th echelon repairs, however. The purpose of such training is to enable them to locate sources of vehicle failure and to call for proper parts and repairs from ordnance repair shops. They will also make the 1000- and 6000-mile technical inspection of company vehicles. As mechanics, these men will have received schooling in the publications listed in paragraph 31, MTP 10-1. In addition, they must become thoroughly familiar with Technical Manuals 10-1116, 10-1117, 10-1118, and 10-1119, which are parts lists and maintenance manuals for the Autocar Tractor-Trucks. In addition to the publications referred to in paragraph 18, the mechanics should also have a thorough understanding of the Motor Transport School Text No. 11, Inspection, or TM 9-2810, Motor Vehicle Inspections and Preventative Maintenance Servicing. They should know how to prepare the WD QMC Form No. 260, Technical Inspection Report of Motor Vehicles, and should have a comprehensive knowledge of all its implications and demands.

27. SHEET METAL WORKER (201). This man is rated as a technician, 4th grade. In the theater of operations, the sheet metal worker will undoubtedly be called on to fabricate and repair a wide variety of sheet metal articles and equipment. Repair of trailer bodies, and fabrication of pails, tubs, and troughs are some of the more important items required from time to time when the regular source of supply cannot be depended on. It is important that other members of the company be instructed also to carry on this type of work.

28. STEAM FITTER (163). This specialist should be able to assemble, install, and maintain water supply, and air, gas, and water disposal systems. His routine work will consist of bending, cutting, reaming, and threading pipes; calking and soldering joints, and testing connections and pipe systems for leaks. Other men in the company should be trained as alternates and assistants to this man.

29. WASHMEN AND TUMBLERMEN (103). There are 32 washmen in the quartermaster laundry company, semimobile, 16 of whom are classified as technicians, 5th grade. They are more properly classified as laundry machine operators. They should understand thoroughly such matters as the proper temperature of water, relative fastness of types of dyes and various colors, and the proper amount of detergents and sours to be used in the process of washing clothes. Matters of this nature are responsibilities of other personnel within the company, but the machine operator is always at the scene of operations and, in general, will control the results. In addition to the washmen, there are 32 tumblermen in the company, 16 of whom are technicians, 5th grade. These men operate the tumblers. They should be qualified as washmen, however, since they work in conjunction with the latter and will often alternate in their work. There are eight tumblermen and washmen per section who are responsible for the operation of the washing unit, the extractor unit, and the two tumbler units of two laundry trailers. Where the two trailers are set up to operate as a single unit, four of these men will be required to operate the two trailers on one shift and four others to operate both trailers on the second shift. In short, one tumblerman and one washman should be capable of operating the washer, extractor, and tumbler units.

CHAPTER 3

TRAINING

	Paragraphs
Section I. General	30-33
Section II. Training on location	34-43
Section III. Mess	44
Section IV. Moral and physical welfare	45



SECTION I—GENERAL

30. METHODS. The training program in newly organized units will vary with the size of the trained nucleus and the number of partially trained and untrained men in it. Training plans must avoid needless repetition for the well-trained and assure thorough and progressive training for the untrained. To this end, the trained cadre should be utilized as instructors to the greatest extent practicable. When the number of trained personnel is limited, greater centralization of training is necessary. For example, a lack of qualified instructors might require the platoon commander himself to conduct the greater part of the training in his platoon. This procedure should be followed only until noncommissioned officers are qualified to assume training duties.

31. OBJECTIVE. a. The company commander should direct all company training toward the following ends:

- 1 Disciplinary training of the soldier.
- 2 Physical training, military sanitation, and first aid.
- 3 Marching.
- 4 The company's own administration.
- 5 The company's own shelter, supply, and movement.
- 6 The company's own security, including measures against air and mechanized attacks.

TRAINING PROGRAM, FIRST THIRTEEN WEEKS

Quartermaster Laundry Company, Semimobile

Subject	Text Reference	Total Hours	Hours Per Week										
			1	2	3	4	5	6	7	8	9	10	11
Basic military subjects (see ASF basic military program)		256	48	48	48	48	48	48	48	48	48	48	48
Duties of personnel—Mission; organization; transportation and equipment; function and duties of specialized personnel.	TM 10-350; T/O 10-167	32											
Vehicles and equipment—Types and purpose; operation and maintenance to include general repair and service; operating lay-out.	TM 10-510; TF's 11-551 to 11-559, incl.; FS 10-43; T/O 10-167.	40											
Supplies—Kind and use; method of procurement; storage.	TM 10-250; Procurement Regulations, September 5, 1942.	32											
Receiving—Sorting and marking; practical demonstration.	TM 10-350	10											
Operations—Washing; drying; sorting; return of clothing; duties of personnel in actual operations; practical operation under competent supervision.		46											
Specialist training ¹													
Mechanists (114)		160											
Chasseurs (345)		(160)											
Automobile mechanics (014)		(160)											
Carburetion and ignition		(160)											
Chassis specialist		(160)											
Engine specialist		(160)											
Clerks (055) (405)		(160)											
Electricians (078)		(160)											
Laundry operators (103)		(160)											
Reviews, examinations and demonstrations; training, inspections; corrections in training deficiencies; field exercises on operation of unit in the theater of operations; preparation of unit for activation.		48											
Total													
		624	48	48	48	48	48	48	48	48	48	48	48

FIGURE 6

¹ All specialists called for in T/O 10-167, April 1, 1942, such as machinists (114), chauffeurs (345), automobile mechanics (014), clerks (055) (405), electricians (078), and laundry operators (103), will normally be furnished from specialist schools of the Quartermaster Corps; but when necessary, training of these men can be accomplished during a second 4-week training period by programs applicable to their specialty.

Steamfitters (163), stationary gasoline engineers (081), stationary boiler fitters (084), etc., will be trained at specialty schools and replacement centers, or obtained directly from inductees at reception centers, having the necessary previous civilian specialty experience.

- 7 Camouflage.
- 8 Communication and liaison.
- 9 Protective measures against chemicals.
- 10 Expert care and use of weapons, equipment, and transport.
- 11 Demolition.
- 12 The fulfillment of the company's mission.
- 13 Balanced, progressive training.

b. The company commander must remember that training in all subjects should progress from the elementary to the more advanced. The individual must be physically hardened, conditioned to marching, qualified to use his weapons, and to care for himself, his equipment, and his means of transportation. Training in essential basic and technical subjects must be so balanced that the individual can take the field at any time.

32. THE PROGRAM FOR UNIT TRAINING. As has been indicated above, the first 4 weeks of unit training will conform in general to Mobilization Training Program 10-1. This program, however, is subject to modification as the situation may require, taking into consideration directives from higher authority, facilities available, and weather. At this point attention is directed to Field Manual 21-5, Military Training, dated July 16, 1941. The company commander will do well to consult Section 9 and Appendix II of that manual in the preparation of his training program. The company commander must strive at all times to develop leadership and teamwork, as well as to train individuals. The program must be planned to make use of all officers and noncommissioned officers for instruction of their subordinates. Training will thus develop leadership, initiative, and judgment, which in turn will earn the respect and confidence of subordinates. Organization for unit training depends primarily upon the purpose for which the training is conducted. The semimobile laundry company program should place special emphasis on the following training matters:

- a.** Functions and duties of specialized personnel.
- b.** Care and maintenance of special equipment and vehicles.
- c.** Operation of the laundry units.
- d.** Group training of specialized personnel for the technical work they will be required to perform.

TRAINING PROGRAM, SECOND THIRTEEN WEEKS

Subject	Text Reference	Total Hours	Hours Per Week											
			1	2	3	4	5	6	7	8	9	10	11	12	13
BASIC MILITARY SUBJECTS:														
Articles of war; pitching shelter, pyramidal and wall tents; physical training and mass games; field sanitation; special weapons; close order drill, extended order drill and combat principles.	FM 7-10, FM 7-15, FM 8-40, FM 21-5, FM 21-10, FM 21-15, FM 21-20, FM 21-100, FM 21-150, FM 22-5, FM 23-7, FM 23-10, FM 23-30, FM 23-40, FM 23-65; TM 9-294, TM 9-390, TM 9-1215, TM 9-1225, TM 9-1270, TM 9-1990, TM 9-2200, TM 9-2210; TF 7-560, TF 7-561, TF 11-184, TF 11-235, TF 17-963 to TF 17-967 incl; FS 7-18, FS 7-19, FS 8-1, FS 8-2, FS 8-7, FS 8-9, FS 8-24, FS 8-39, FS 17-2; Manual for Courts-martial; TC's 87 and 104, WD 1942; TC's 22, 30 and 46, WD 1943.....	80	8	8	8	8	8	8	8	8	8	8	8	8
MAP READING:	FM 21-26, FM 21-35, FM 21-100, FM 25-10, FS 30-20; TM 21-300; TF 5-12, TF 11-556; FS 5-1.....	20	4	4	4	4	4	4	4	4	4	4	4	4
SECURITY:	Reconnaissance; defense against mechanized, guerrilla, chemical, air and para-troop attack; concealment, dispersal, and camouflage; protective clothing; slit trenches and fox holes.	FM 5-15, FM 5-20, FM 10-21, FM 10-10, FM 21-40, FM 21-45, FM 21-100, FM 21-150, FM 23-10, FM 30-25, TM 5-269, TM 5-269, TM 21-300; TF 3-650, TF 3-689, TF 5-146, TF 5-148, TF 5-149, TF 5-645, TF 5-646, TF 5-648, TF 5-649, TF 5-954, TF 5-961, TF 7-108, TF 7-234, TF 7-275, TF 7-280, TF 21-1019, TF 25-394, FS 3-1, FS 3-15, FS 5-10, TC 73, WD 1941; TC 52 and 75, WD 1942; TC 25, WD 1943.....	40	4	4	4	4	4	4	4	4	4	4	4
DECONTAMINATION:	Use of apparatus to decontaminate equipment, supplies and areas.	FM 21-40, FM 25-10, TM 3-215, TM 3-220, TM 8-285; TF 3-667, TF 3-687, FS 3-3, FS 3-11; TC 76, WD 1942.....	16	4	4	4	2	2	2	2	2	2	2	2
DEMOLITIONS:	How and when to demolish equipment and supplies.	FM 5-25, FM 23-30, TM 9-2900, TM 21-300; TF 5-270 to 5-273; FS 7-4.....	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
OPERATIONS:	Actual use of laundry unit in the field, as a means to study: cold water system; hot water system; boilers and return system; engine-generators; plumbing and electrical system; marking and receipt; sorting and delivery; use of washing formulas; laundry supplies—kinds, procurement.	TM 10-350, TM 10-351, TM 10-510; TF 11-551 to 11-559; FS 10-43.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Operation under adverse conditions, including cold climate, jungle, desert, etc.; night operations.	FM 31-15, FM 31-20, FM 31-25.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Preventive maintenance of organizational equipment.	TM 10-225, TM 10-350, TM 10-351, TM 10-510, TM 10-545, TM 10-590, TM 25-10; TM 10-510, TM 10-545.....	288	26	26	26	26	26	26	26	26	26	26	26
	Second echelon repairs of mobile equipment, including tractors, trailers and trucks.	.....	96	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
FIELD OPERATIONS:	Tactical and logistical functioning.....	.....	48	48	48	48	48	48	48	48	48	48	48	48
INSPECTIONS:	Basic and technical.....	FM 21-100, FM 22-5, TM 10-350, TM 10-351, TM 10-545; FS 8-13.....	20	2	2	2	2	2	2	2	2	2	2	2
	Reviews, examinations, corrections in training deficiencies, and preparation of unit for activation.	.....	48	48	48	48	48	48	48	48	48	48	48	48
	TOTALS.....		624	48	48	48	48	48	48	48	48	48	48	48

FIGURE 7

33. THE MILITARY PROGRAM. **a.** The fact that the semimobile laundry company has routine duties to perform must not be permitted to interfere with carrying out a definite military training program. The enlisted man of the Quartermaster Corps is no less a soldier than his brothers in the arms, and he must receive the same careful instruction. This is of primary importance, since the nonmilitary nature of his work has a tendency to make him unmilitary in bearing, and lacking in alertness, discipline, and morale. Since in today's warfare, enemy planes and tanks see primarily the installations deep behind the so-called front, every unit must be prepared to protect itself from either or both of these kinds of attack. Seldom will there be time for attachment of protective local security troops. The unit training program, starting with the 9th week, provides eight hours a week for military subjects.

b. Personnel of the laundry company should receive thorough training in the detection of booby traps, as their work will frequently take them to areas which were recently the scene of action and where numerous items of abandoned personal property and military equipment may be seen. (See WD Training Circular 75, 1942.)

c. All members of the command must be prepared for immediate defensive action in the event of an attack involving chemicals. It is an inescapable command responsibility to maintain strict discipline with regard to carrying the gas mask or having it within easy reach at all times. Troops which become negligent in the matter of carrying gas masks are inviting the enemy to initiate chemical warfare. (See WD Training Circulars 76 and 86, 1942, and 8 and 11, 1943.)

d. All members of the command must be trained in the use of weapons, especially in defense against air and mechanized attack. These weapons include rifles, carbines, submachine guns, machine guns (.50 caliber, HB, flexible), and rocket launchers (AT M1). (See WD AGO Memo. No. W700-9-43.)

SECTION II — TRAINING ON LOCATION

34. THE TECHNICAL BACKGROUND. The training of personnel who are to wash clothes will be accomplished during their second 4-week period. This technical training may be taken either before or after they join the new company. These laundry technicians will study a wide variety of subjects on laundry operations. See

MTP's 10-1 and 10-2, for the technical training programs of the laundry operators. Study of these schedules will reveal that some subjects not directly related to field laundry operations are included. Such training is desirable since it gives the trainee a broader background and a deeper understanding of his work.

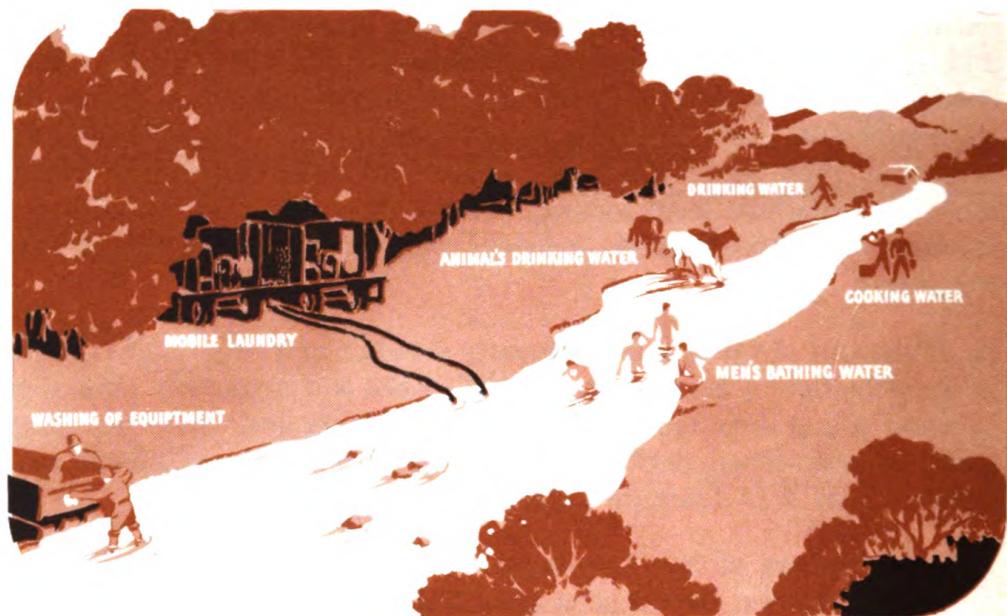


FIGURE 8
PLAN FOR FULL USE OF STREAM BY TROOPS

35. LOCATION OF OPERATING SITE. a. Water factor. A semimobile laundry establishment should be located near a plentiful and clean water supply. Good results cannot be obtained if clothes are washed in dirty water. Usually laundries will be operated in rest areas of the combat zone. Figure 8 presents the recommended location of a laundry installation on a stream being used by troops for other purposes. Each trailer should be placed as close to the edge of the water source as practicable in order to reduce the load on the water pumps. As has previously been pointed out a position close to the water source may eliminate the necessity of using the auxiliary pumps.

b. Terrain factors. A site should be chosen where the ground is solid and well drained, so that adequate support may be assured for the trailers and prime-movers in any weather. The site must also be accessible to a traveled route or road net, and must be large enough for a turn-around where incoming vehicles can pass in front of the marking and sorting tent and out to the route of departure.

c. Weather factor. Another item to be considered in locating the laundry site is the meteorological factor. In gusty or cold weather geographic conformations should be taken advantage of to protect against wind and cold. The trailer should be set up with the closed end to the windward in order to keep out the cold and dust and dirt. Where two trailers are operating side by side, a piece of canvas or other suitable material may be used to cover the back opening onto the platform. The two outer sides of the trailers may be kept closed. If properly protected, personnel and machinery will be kept warm enough for maximum efficient operation by the normal operation of the plant or plants. If inadequately sheltered, much of the heat produced by the plant is lost. In warm weather every advantage should be taken of the prevailing winds. Both sides of the trailer should be let down and the open end should be faced in the direction of the breeze.

d. Camouflage factor. In training during field exercises or in the theater of operations, semimobile laundries will probably never be set up closer to the zone of combat than in the advance section of the communications zone. However, this establishment must take all normal precautions against tank and aerial observation. Situated beside a stream or lake, the installation will usually have the natural protection of trees. Where necessary, however, nets, screens, and mats must be employed. The men of the semimobile laundry company must be impressed early with the importance of camouflage discipline. The proper employment of camouflage measures is a major responsibility of the commanding officer of any rear echelon establishment. Such tricks as the use of dummy roads must be taught. Men must be shown by practical demonstration wherever possible; otherwise, they may not be convinced, and may violate fundamental camouflage laws. The laundry officer must thoroughly learn the contents of the following publications on concealment and camouflage:

FM 5-15, Field Fortifications.

FM 5-20, Camouflage.

FM 21-100, Soldier's Handbook.

Training Film, 7-234, Use of Natural Cover and Concealment.

This film may be employed effectively to impress each individual with the necessity of conforming his movements to natural camouflage principles.

36. SETTING UP THE TRAILERS. a. Relative position. Normally, two laundry trailers will operate as a single unit. (See figure 9.) This arrangement, in addition to affording protection from the

elements, requires only one crew of markers, folders and resizers, and miscellaneous personnel, and allows the plant detail to double up on the work where profitable. Where classifying is necessary, one class of clothing may be sent to one trailer and the other to the second. It will be found convenient to place the two trailers close enough together to form a solid walk between the plants when the trailer sides are let down.

b. Leveling. ① *Interval between dolly wheels and plates.* As the tractor pulls the trailer into position, a check should be made to assure that the distance between the dolly wheels and the base upon which they will rest is between three and four inches. The landing gear should not be adjusted to obtain the proper interval, but rather shims should be employed. When the unit is set up on a slope, it may be necessary to dig in one or both of the main wheels. As attached to the tractor truck, the front of the trailer is higher than the rear. When the truck gradually moves out, the trailer will slowly be lowered into a nearly level position.

② *Coordination of fifth wheel and landing gear.* When semitrailers are coupled and uncoupled, it is important that movements of the landing gear be coordinated with the fifth wheel lock. If the landing gear is elevated before the fifth wheel connection is fully locked, the front end of the trailer will drop to the ground when the tractor is driven away, with the possibility of damaging both the load and the semitrailer.

(a) Uncoupling will be accomplished in the following sequence:

1. Apply tractor brakes.
2. Apply trailer brakes.
3. Place the wheel chocks.
4. Crank down the dolly wheels.
5. Pull hook lock handle.
6. Disconnect break hoses and lights.
7. Pull ahead slightly to determine that brake and chocks are secure.
8. Check supports.
9. Pull clear.

(b) Coupling procedure is as follows: Back tractor close to trailer, connect brake hoses, make sure fifth wheel lock is open, set trailer brakes, couple up, make sure coupling is secure, connect and check lights, remove chocks, raise supports and replace handle, check brake operation.

3. *Adjustment of stand-jacks.* At this point, the stand-jacks will be lowered into position and based on steel plates. The screw mechanisms of the stand-jacks (see paragraph 98) will then be adjusted so that the weight of the trailer is equitably distributed over the jacks, landing gear and the rear-wheel assembly. The trailer must be firmly footed to minimize vibration; the stand-jacks are not constructed to support the full weight of the trailer except momentarily during leveling. Minor adjustments of the jacks will be required to bring the trailer to a level position, which can be determined by a carpenter's level. Usually it will be impossible to get the trailer 100 per cent level; but, for operation without undue stress on shafts and wear on bearings, the centrifugal principle upon which the washing and drying machines work requires almost perfect plumb.

37. PITCHING TENTS. During the time that the other men of the section are placing the trailer in position, men assigned as markers, resizers and folders should pitch the tents (see paragraph 94) as close to the trailers as possible without violating principles of camouflage and without causing movement to be restricted. The equipment should then be set up within the tents (one for handling the clothes and the other for carrying on the administrative work and housing supplies) and the marking started so that work can begin as soon as



SUGGESTED ARRANGEMENT OF LAUNDRY INSTALLATION
FIGURE 9

the laundry plant is ready to start washing. Figure 9 illustrates a common arrangement of a semimobile laundry installation. In this case, as has been suggested, clothing will be received and issued at the same tent. Another possible setup is to pitch a tent at either end of the two trailers so that clothes may be received at one tent, processed directly through the plant (from the end in which the washers are located), to the tent at the other end, and from there distributed. Where a platoon is working as a unit, one tent may be used for marking, one for sorting and distributing, one for supplies, and the fourth for administration.

38. INDIVIDUAL BUNDLE WORK. The semimobile laundry company is equipped to do individual bundle work. Marking and classifying is done by men designated as markers and is accomplished by the use of numbered marking pins. As each individual bundle is received at the marking tent, it is assigned a marker showing the lot letter (see paragraph 94) and the bundle number within that lot. One pin may be used to secure several small articles, such as handkerchiefs and socks. There are sixty-four lots of pins, each composed of twenty-four pin trays. Each pin tray contains twenty pins. Occasionally, one tray will not be sufficient to mark a given bundle, and a second tray will have to be used. A note will be entered on the laundry slip showing which trays were used to mark the bundle. Normally, therefore, twenty-four bundles will comprise a full lot. After marking the clothes, the blue denims and denim laundry bags will be separated from the other articles (classification) and sent to the laundry plant for separate washing. Blue denims and other colored articles which are not fast-color dyed have a tendency to crock other clothes. Under ordinary field conditions, one-half of the articles by weight are colored. Where individual bundle service is employed, resizing of clothing will not be necessary. Hence, folders and resizers will reassemble the clothing by means of the numbered pins, gathering all articles having the same pin number, and re-checking the laundry slip to insure that the bundle is complete.

39. BULK WORK. Under certain conditions, the field laundry service will wash clothes on a bulk basis only. Since bulk laundry is not washed for specific individuals, marking devices are not necessary. The markers, therefore, will be engaged in the work of sorting and classifying—separating articles likely to “run” from fast-dyed items, and sorting by article if desired. Sorted or classified clothes will be placed in the laundry baskets for transfer to the laundry plant. Each basket should be filled with about 60 pounds of clothing, since this is the capacity of the washing machine. Upon return from the laundry

trailer, the clothing will be sorted according to article (if not previously done), resized (if the unit is operating in conjunction with a sterilization establishment), bundled, and returned to the source from which it was obtained or sent to a salvage repair installation. (See figure 22.)

40. RESIZING. Resizing consists of measuring articles in conformity with the instructions contained in appendix E, parts I and II. Sizes will be marked in the clothing as indicated below:

- a.** Breeches, trousers, and drawers—inside the waistband near the center.
- b.** Coats, jackets, overcoats, and working suits—inside the collar at center. (Coats and overcoats will be laundered only under exceptional circumstances.)
- c.** Caps—inside sweat band.
- d.** Leggings—inside calf at top.
- e.** Shirts—on facing of inside of button-retaining hem near the collar.
- f.** Socks—near top, inside.
- g.** Undershirts—on rear top, inside.

41. STARTING THE LAUNDRY PLANT. The laundry machines will not be put into operation until all instructions on page 11, TM 10-351, under the caption, Before Starting Unit, have been complied with. Starting and operating instructions given in that manual should be followed closely. (For operating other than the Troy model, see TM 10-260, Quartermaster Salvage, Theater of Operations.) In general, however, the procedure will be to start the generator engine first and wait until its volt-meter registers 220, and until the engine warms up to normal temperature and speed. Now the water pumps will be started, and the hot-water heater, the boiler, and the condensate tank will be filled with water. The oil burner and boiler may now be started. Gauges will show when the steam attains a normal pressure and the hot water heater reaches the required temperature. The plant is ready for operation. Unless the boiler personnel arrives early enough to make available a full head of steam and plenty of hot water, the other personnel will have to remain idle until the foregoing is accomplished. (See paragraph 22)

42. WASHING INGREDIENTS. **a. Water.** The water should be the cleanest and softest available.

b. Soap. The detergent supplied to semimobile laundries is a synthetic type of soap. It is a good "dirt" solvent in hard or soft and hot or cold water. It will form suds in acid and alkaline solutions alike. It is made from a base of sulphonated alcohol plus about 35 per cent dry solvents (such as carbon tetrachloride and carbon disulphide). Three ounces per sixty pounds of clothes is normally required, but the amount will vary with the condition of the clothes. For heavily soiled articles, such as canvas from the field bakery, it may be necessary to use regular laundry soda in the first break.

c. Sour. The laundry sour is a finely powdered homogeneous mixture of sodium silicofluoride and sodium acid fluoride, with one per cent antichlor compound. Three ounces of the sour is normally used in the last rinse to neutralize and precipitate any alkaline residue that may have collected on the clothing during the washing operation. It tends to kill bacteria and washing odors. The sour is generally applied by dusting the dry powder over the revolving perforated washing cylinder.

43. THE WASHING PROCESS. Very simply stated, the washing process will conform to the following general instructions:

a. The operating schedule for washer.

Quantity	Type of Solution	Water Level in Washing	Time of Operation
Approximately 60 lbs. of clothing per run	break suds (1½ oz. soap) break suds (1½ oz. soap) rinse rinse rinse (3 oz. sour)	8 inches 5 inches 9 inches 9 inches 9 inches	5 minutes 5 minutes 3 minutes 3 minutes 3 minutes
Total.....			19 minutes

Note: Water temperature should be between 90° and 100° F.

b. The extractor run. The washing phase having been completed, the next step is to remove the clothes from the washer and fill the extractor. This will accommodate about half the load. The remainder may be placed either in the drain box (or shelf) until the extractor is ready for it. An extractor run of 5 minutes will remove about 70% of the water from the clothes.

c. The drying process. As the clothes are taken from the extractor, they will be placed in a dry tumbler for 14 to 20 minutes, depending upon the operating efficiency of the plant and climatic conditions. Each tumbler is designed to handle one extractor load. When dry, the clothes will be placed in the baskets again and returned to the marking and sorting tent for processing as outlined in paragraph 39.

SECTION III — MESS

44. COMPANY MESS. The operation of a company mess is one of the most important functions of command. Food of a good quality and adequate variety in sufficient quantity is one of the most important morale factors in any military organization. The company commander may delegate supervision of the mess to a junior officer. However, he cannot escape responsibility for efficient mess operation. It is his responsibility to acquaint himself sufficiently well for purposes of supervision and to make sure that all mess personnel are thoroughly familiar with the following publications:

- a.** TM 10-205, Mess Management.
- b.** TM 10-210, Inspection of Subsistence Supplies.
- c.** TM 10-410, The Army Baker.
- d.** TM 10-405, The Army Cook.
- e.** TM 12-250, Administration.

SECTION IV—MORAL AND PHYSICAL WELFARE

45. RELIGION, ATHLETICS, AND RECREATION. Recreational and religious opportunities and organized athletics are essential for the physical, mental, and moral welfare of any company. Especially is this true of the laundry company, where the work is apt to prove tedious and monotonous at times. In garrison or at other times when such an arrangement is possible, a well-qualified junior officer should be designated to take over the recreational and athletic program and special service activities for the company. When the company is split up into its various operating sections and platoons, it will be well for each platoon commander to take aggressive action in this matter. Where possible he should lead the platoon in a certain amount of organized athletics each day, or appoint one of the non-commissioned officers to take charge of this detail. He should impress upon his men the importance of keeping fit at all times. All officers of a laundry company should acquaint themselves with the following publications:

- a.** TM 21-205, Special Service Officer.
- b.** TM 21-220, Sports and Games.
- c.** TM 16-205, The Chaplain.

CHAPTER 4

ADMINISTRATION

	Paragraphs
Section I. Training considerations	46-48
Section II. Administrative considerations	49-53
Section III. Initial property considerations	54-57
Section IV. Company property records	58-61



SECTION I — TRAINING CONSIDERATIONS

46. PRESENT PROCEDURE. Under prescribed mobilization plans, unit training centers will be set up, and companies, upon being activated at these centers, will receive untrained men (except those, of course, who may have had previous military training or who may be qualified by reason of civilian background as occupational specialists) directly from reception centers. To date, a few quartermaster units have been activated from freshly recruited material, but general practice has been to transfer men from replacement training centers for this purpose. These men may or may not have received their entire basic and technical training.

47. TRAINEES WITH PARTIAL OR NO TRAINING. **a. First eight-week training period.** A company activated from personnel drawn from reception centers will have to complete the entire prescribed training program. The first four weeks are devoted to basic training, during which period such subjects as close and extended order drill, map reading, physical training, and

other allied matters are studied. The second four-week period is a technical phase, during which the various specialists as called for by the Table of Organization will receive technical training through facilities provided at the home station or at specialist schools located elsewhere. In the laundry company, such specialists as the automotive mechanics, the electrician, and laundry operators will be required to attend such schools, and during this period the cadre men also, if not fully trained in their duties, will receive additional instruction, perhaps at specialist schools. One of the company commander's first steps should be to discover the lacking prerequisites within his organization by means of a personal check with each individual. He should base his estimate of the need for, and the amount and kind of training still required on:

- 1** Whether the man is a prior service man with prior experience in his specialty and is therefore fully qualified.
- 2** Whether each cadre man is fully trained in his specialty. Men found lacking in training will require further instruction.
- 3** Whether the man is an occupational specialist who had a civilian vocation corresponding to his present military specialty. Such a man must receive training in the military application of his civilian vocation.
- 4** Whether the man is completely without training.

b. Training for 9th to 12th weeks. Subsequent to this 8-week training period, all members of the unit should be qualified to step immediately into phases of training as prescribed for the 9th to the 12th weeks inclusive, as shown in paragraph 17, Mobilization Training Program 10-1.

48. TRAINEES WITH PARTIAL TRAINING. As previously stated, quartermaster companies at present are generally activated from personnel trained or partially trained at replacement training centers. With rare exceptions, men derived from this source will have completed at least basic training, and the company commander, therefore, will be able to eliminate from consideration all of the training requirements as prescribed by the mobilization training program for the 1st to 4th weeks. Men trained at replacement training centers ordinarily will have completed the technical training prescribed by the training program for the 5th to the 8th weeks. It is imperative, however, that the company commander make a personal check to determine the amount of technical training each member of his new company possesses. It may be necessary for him to institute the com-

plete phase of training prescribed for the 5th to the 8th weeks. During this time he will have an opportunity to provide specialist training for untrained men who are to fill certain technical positions, such as those of automotive mechanics, electricians, and sheet metal workers. This is the significance of Note 1 affixed to the training schedule. Under certain circumstances the complete technical training of the company may require a period of longer than 4 weeks. After the company commander has satisfied himself that the basic and technical training requirements of his company are fully completed, he is ready to institute the third phase of the training program, namely, unit training. (See Chapter 3, section I, for a discussion of unit training.)

SECTION II — ADMINISTRATIVE CONSIDERATIONS

49. ORIENTATION OF THE COMMANDING OFFICER.

a. Not all problems which may confront the laundry officer can be anticipated. Nor does space permit a detailed treatment of all subjects with which he must familiarize himself. At this point, on the matter of administration, it must be pointed out that the use and preparation of a large majority of military administrative forms is necessarily treated here in only a brief manner. Army Regulations and TM 12-250 must be consulted where technicalities of administrative matters must be settled.

b. The commanding officer of a "separate" or "detached" company is often left to his own resources and devices. Where another company, organically a part of a regiment which in turn is organically a unit of a division, is assured the facilities of a personnel section and the services of a regimental supply officer (and usually a custodial officer), motor officer, adjutant and other regimental staff officers, the commander of a "separate" or "detached" company may be left over indefinite, and possibly protracted, intervals without the assistance of any or all of these guiding hands.

c. It is most important that the company commander allocate the work of the company in such a manner that no undue burden is placed on anyone. For instance, when the facilities of a personnel center are not available, clerical work may be divided among three clerks; one to take care of routine company matters and special jobs; another, pay rolls and financial matters; and the third, service records and allied papers. The commanding officer of a "separate" company will always have the services of his company clerk; but if the company is part of a higher unit, or if it has been assigned a personnel section through

which its administrative matters will clear, the company clerk will be available for duty in the orderly room only at odd periods. He will be working under the supervision of the unit personnel officer at the personnel center. Therefore, to assure himself of the services of a clerk at all times, the company commander should designate an assistant or alternate clerk, who will take care of administrative work pertaining solely to the company. During the initial unit training period, the record clerks should be trained as understudies to the company clerk. It should be borne in mind that the record clerks may sometimes be called upon for work of a general administrative nature when the company is functioning in a theater of operations. (See paragraph 115.) It is essential that alternates be trained for every job within the company, because cadres may have to be furnished from this company for the activation of other units, and casualties may have to be replaced in the field.

50. INITIAL PERSONNEL ROSTERS AND CHANGE CARDS. In instances where facilities of a personnel section may not be provided, the first general administrative activity incumbent upon the company commander at the inception of his organization is the preparation of the initial personnel rosters. (See paragraph 6c, AR 345-800.) This roster is called for upon the activation, reorganization, or demobilization of any military establishment. Upon completion, the roster (prepared on WD AGO Form No. 309; see paragraph 11, AR 345-900) will be forwarded to the next higher administrative echelon which will in turn forward it through channels to the area Machine Records Unit. Report of Change cards (WD AGO Form No. 303) reporting the activation (or reorganization or demobilization) will be forwarded with the roster. For preparation of Report of Change cards (WD AGO Form No. 303), reference should be made to AR 345-800 as changed. (See also paragraph 12, AR 345-900 on the preparation of initial rosters, final rosters and special rosters.)

51. OTHER ADMINISTRATIVE RECORDS. Other initial administrative steps required of the company commander, aside from property considerations, are as follows:

- a.** The initiation of the Morning Report, the Sick Book, the Duty Roster, the Council Book, a bank account (if one is to be opened), the Punishment Book, the Company Property Book and the correspondence file.
- b.** Check the allotment of personnel against the Table of Organization for the company.

c. Check each individual's Qualification Card and Service Record, so that he can be placed in the position for which he is best fitted. (This work will be carried on by the personnel officer if the company is activated as part of a battalion or otherwise assigned to a personnel section. In any case the company commander should personally make a check of the Qualification Cards).

52. ADMINISTRATIVE FORMS REQUIRED.

Initial issue of forms may be automatic; if not, however, the company commander starting a new company should immediately provide himself with the following essential forms:

<u>WD AGO</u> <u>Form No.</u>	<u>Title</u>	<u>Preparation Reference*</u>
1	Company Morning Report.....	AR 345-400
5	Daily Sick Report.....	AR 345-415
6	Duty Roster.....	AR 345-25
32	Individual Clothing and Equipment Record.....	AR 615-40, Sec. II
33	Individual Equipment Record.....	AR 35-6680
35	Individual Clothing Slip.....	AR 35-6560
36	Statement of Charges.....	AR 35-6620 AR 35-6640 AR 345-300

<u>WD QMC</u> <u>Form No.</u>	
15	Company Council Book..... AR 210-50
400	
409	Requisitions (these forms are not absolutely necessary, however, since requisitions may be submitted on blank paper, or orally when an organizational supply officer is serving the unit)..... AR 35-6540
411	
412	
413	
414	AR 35-6720 WD Cir. 405, 1942

53. REFERENCE TO APPENDIX ON ADMINISTRATION. Attention is directed to Appendix F, parts I and II, which consists of a series of check lists covering the preparation of administrative forms and records for a "separate" or "detached" company. In case the company is being activated as part of a battalion, or is otherwise assigned to personnel section, the appendix should be modified accordingly. Appendix F, part III, lists the duties of the personnel adjutant.

*In addition, TM 12-250 may profitably be consulted.

SECTION III — INITIAL PROPERTY CONSIDERATIONS

54. INDIVIDUAL CLOTHING AND EQUIPMENT.

As soon as the company has received its full complement of enlisted men, a check should be made to determine what items of clothing and equipment they had in their possession upon reporting. Cadremen will ordinarily report with a complete issue. Paragraph 3b, AR 615-40 states that men transferring from replacement training centers to permanent stations (in this case, meaning a permanent assignment to a laundry company) will be equipped with articles of clothing authorized for issue in the continental United States by column 2, Table of Basic Allowances 21, except Helmet, steel, M-1917 or M-1, and equipment as listed in paragraph 2d(2), AR 615-40, and gas mask. Men direct from reception centers will have less clothing and equipment in their possession when they report for duty. (See AR 615-40.) After the total amount of individual clothing and equipment is determined, a check should be made against the equipment chart shown in appendix G, or T/BA No. 21. Deficiencies should be made up immediately by submitting requests in accordance with regulations on the property officer concerned. However, all articles of clothing and individual equipment not authorized for issue at reception centers will be received automatically when the unit is activated. Therefore, certain articles already in the hands of the enlisted men may have to be turned in because the men may have come from training centers or because of their change from a general to a special assignment.

55. OTHER ITEMS OF T/BA PROPERTY.

Other items of T/BA property include organizational clothing and organizational equipment listed in T/BA 10 (or eventually the company Table of Equipment) or the Table of Organization (except controlled items, which will be delivered as they may become available). These items of clothing and equipment will be laid down automatically by the several post property officers upon activation of the new unit. The company commander may be required to sign shipping tickets prepared by the various property officers or combination equipment charts and requisitions. (See Cir. Ltr. No. 416, SOS, OQMG, subject: Equipment for Newly Activated Units and Newly Activated Stations, Nov. 20, 1942.) A check should be made of the items received against the shipping ticket and/or combination equipment chart and requisition, the Table of Basic Allowances or Table of Equipment if available (see AR 310-60), and the Table of Organization. For the company commander's convenience, the equipment chart shown in Appendix G is provided. Any items authorized and not received should be brought to

the attention of the property officer, who should make the proper adjustment as soon as possible. Although the company commander is not required to give memorandum receipts for T/BA property, he may require them when he loans such property to others.

56. TABLE OF ALLOWANCES OF POST PROPERTY. The commanding officer of a newly activated unit must determine whether or not the post at which his unit is being activated operates on the custodial system within the meaning of War Department Circular No. 405 of 1942. If it does, the initial issue of post property will be turned over by the custodial officer to the commanding officer of the new unit without requisition or other formality. On the other hand, if no custodial officer is available as an intermediary, the commanding officer of the new unit will have his post property issued automatically by the post property officers, but will be required to sign memorandum receipts for it.

57. REPLENISHMENT OF PROPERTY. **a. General.** Replenishment of property will not be automatic. In general, it will be the result of submitting the required completed requisition form on the appropriate supply officer. There are exceptions to this rule, however. The company commander must thoroughly acquaint himself with the following regulations and directives on the replenishment of items as specified below:

1 Expendable supplies.

- (a) Circular 1-18 OQMG.
- (b) Tables of Basic Allowances.
- (c) Table of Allowances.
- (d) AR 30-3010 (Budget credit items now issued in accordance with allowances shown in (a) above).
- (e) Paragraph 3b, AR 35-6540.
- (f) Paragraph 13, AR 35-6560.
- (g) AR 35-6620 (Expendable property).
- (h) WD Circular No. 405, 1942.

2 Table of Allowances Property.

- (a) AR 35-6540 (Regarding maximum turnover in serviceable post property).
- (b) Paragraph 3, AR 35-6620 (Certificate required in connection with breakage of glassware).

- (c) Table of Allowances.
- (d) WD Circular No. 405, 1942.

3. Table of Basic Allowances Property.

- (a) Paragraph 3b, AR 35-6540 (Replenishment of organizational and individual equipment).
- (b) Paragraph 3e, f, and h, AR 35-6540, and paragraph 39, AR 35-6540.
(Covers sets of spare parts, repair materials and tools.)
- (c) Paragraphs 4 and 5, AR 35-6620. (Quarterly droppage allowances.)

4. Individual clothing and equipage.

- (a) AR 30-3000 (Price list of clothing and equipage).
- (b) Paragraph 14, AR 35-6560 (Individual clothing).
- (c) Paragraph 5, AR 35-6680 (Covers transfer of property other than expendables and individual clothing and equipment taken by enlisted man on change of stations).
- (d) AR 615-40. (Attention is called to paragraph 12, where a model form of an Exchange Order is shown).

b. Expendable items. (Paragraph 3b (1) and 3f, AR 35-6540.)

1. By direct exchange on presentation of the unserviceable article to the proper station supply officer.
2. By requisition for expendable parts, tools and any other items of a similar nature. The requisition will be accompanied by a certificate stating that the articles are required to complete an authorized set, or to replace those which cannot be presented for exchange for the reason stated.
3. By requisition for supplies issued on an allowance basis.
4. Repair materials will be issued on requisition. A certificate to the effect that the material requested will replace supplies that have been used in the repair of Government property is placed on the requisition. Tools and parts not included in repair sets, though not always expendable, will be exchanged in the same manner.

c. Nonexpendable T/BA items. (Paragraph 3b (2), AR 35-6540.)

1. On presentation to the station property officer, through the unit supply officer, a complete voucher covering the articles such as a statement of charges, approved report of survey or quarterly dropping allowance certificate.

2. By direct exchange of unserviceable articles or component parts thereof, accompanied by a certificate that the unserviceable condition is a result of fair wear and tear. If the station supply officer is not satisfied that the unserviceable condition is caused by fair wear and tear, he may require that the certificate be approved by the commanding officer.

3. The transactions contemplated in (1) and (2) above will not ordinarily require an entry in the organization property records.

d. Nonexpendable T/A items. In general, replacement of Table of Allowances items will be obtained as in *c* above normally through the custodial officer, except that requisitions for breakable tableware (aside from listing the articles required) must certify that the amount asked for, in addition to the amount on hand, does not exceed the authorized allowance and that the monetary value of the article requested is within the 5% quarterly breakage allowance (see paragraph 3, AR 35-6620).

e. Clothing and equipage. Clothing and equipage worn out through fair wear and tear may be replaced by completing form Ex0-1 as prescribed by paragraph 12, AR 615-40. Articles not worn out through fair wear and tear will, of course, be accompanied by a statement of charges or report of survey. (See paragraph *f*(1)(c) below.)

f. Requisitions. **1.** Requisitions for supplies and equipment may be made on WD QMC Form No. 400 (Requisition) irrespective of the source or character of the property. Where specific blank forms are prescribed and available, they will be used. Separate requisitions will be prepared for supplies to be drawn from more than one source, i.e., the post quartermaster, the post signal supply officer, and other station property agencies. Specific blank forms prescribed for requisitioning particular classes of property are as follows:

(a) WD AGO Form No. 35 (Individual Clothing Slip). To be used when clothing for a small number of men, usually five or less, is required.

(b) WD QMC Form No. 409 (Requisition and Receipt for Clothing in Bulk). To be used to request clothing for more than five men.

(c) Ex0-1 (Exchange Order for Clothing and Equipage Items). Some such form will be substituted for WD QMC Forms No. 400 and 409 when the articles to be replaced are worn out through fair wear and tear. Ex0-1 will not be used in connection with loss supporting vouchers such as statements of Charges and Reports of Survey.

(d) WD QMC Forms No. 411, 412, 413 and 414. These forms are used to requisition and receipt for brooms, matches, stationery and office supplies, cleaning and preserving materials, china and glassware, etc. (See AR 35-6540.)

2. Requisitions for all items, except clothing and equipage, will be submitted in accordance with WD Circular 405, 1942. Circular 405 states that requests for T/BA property will be submitted to the organizational supply officer informally on any piece of paper or orally. However, it cannot be anticipated that the laundry company will have the services of such an officer available, in which case requests will be submitted formally. Requests for T/A equipment will be made on the custodial officer when such an agent is employed. Except for replacement of such items worn out through fair wear and tear, clothing and equipage may be drawn directly from the post supply officer in accordance with paragraph 14, AR 35-6560.

SECTION IV—COMPANY PROPERTY RECORDS

58. THE COMPANY PROPERTY BOOK. The company property book should be set up to conform to the requirements of WD Circular 405, 1942. WD QMC Form No. 424 (Stock Record Card), altered as necessary and provided with a suitable binder, may be used as pages for the company property book. In lieu of using the WD QMC Form No. 424, any other form may be used for this purpose provided it includes the items of information stated in WD Circular 405, 1942. The property book is not classified as a stock record account and will not be subject to audit. In general, it will list all items of T/BA property except articles of individual clothing and equipment. In some cases, however, it may be convenient to list certain items of individual clothing and equipment in the company property book, especially those articles which should be retained in the company at all times regardless of the turnover of personnel. Specifically, these items consist of clothing and equipment issued to specialists such as truck drivers and cooks. Items of organizational clothing and equipment must also be recorded in the company property book even though they may be in the custody of individual enlisted men and charged to them.

59. INDIVIDUAL CLOTHING AND EQUIPMENT RECORDS. (See paragraph 14, AR 35-6560, AR 35-6680, AR 345-125, AR 615-40, AR 615-45, and TM 12-250, for the preparation

and disposition of these forms). **a. WD AGO Form No. 32 (Individual Clothing and Equipment Records).** This form contains a list of quartermaster items of clothing and equipment and the first aid medical packet. These articles are generally issued to all enlisted men irrespective of their arm or service and they will be recorded on the form as issued.

b. WD AGO Form No. 33 (Individual Equipment Record). This form will be used to record issues of individual equipment which are not listed on WD AGO Form No. 32 and, in general, it will include items issued by supply arms and services other than the quartermaster. It may also be used where organizational clothing and equipment is placed in the custody of the individual enlisted man, but when so used, it should constitute a record separate from the form covering the items of individual equipment. (Where arctic clothing is issued, the use of WD AGO Form No. 34, AR 615-45, should be considered.)

c. WD AGO Form No. 35 (Individual Clothing Slip). In addition to its use as a requisition on the post quartermaster for clothing, this form is also used by the individual enlisted man as a requisition on the company commander for articles of clothing he may require. It is also used to record post property transferred with an enlisted man upon change of station.

60. RECORDS OF POST PROPERTY. (See WD Cir. 405, 1942, AR 35-6520, and TM 12-250) *Memorandum Receipts.* Records of post property will consist in the main of a file of debit and credit memorandum receipts (WD QMC Form No. 487). The file will be accompanied by other information the commanding officer deems desirable. However, no record will be kept by the company commander if the custodial system is employed. It should be borne in mind that items of post property are merely borrowed, and will be returned to the various post property officers before the company leaves the post for a new station unless otherwise provided by specific authority from the War Department.

61. REPORTS COVERING PROPERTY LOST, WORN, DAMAGED OR DESTROYED. **a.** Vouchers used by the military establishment to cover lost, worn, damaged, or destroyed government property are listed below. When properly prepared and accepted they become supporting papers to property losses sustained for any of the reasons listed. Where replacement articles may not be required or are not available, these vouchers must be filed with the company property book as an explanation for such deficiencies.

- 1.** Report of Survey, WD AGO Form No. 15 (see paragraphs 8 to 12, AR 35-6640; paragraphs 51-53, WD Cir. 405, 1942; and TM 12-250).
- 2.** Statement of Charges, WD AGO Form No. 36 (see AR 345-300; paragraph 3, AR 35-7220; and TM 12-250).

b. The Report of Survey will need to be prepared only infrequently; it will be prepared to cover all items of property which cannot be satisfactorily accounted for (i.e., lost, damaged, or destroyed) by a responsible officer.

c. The Statement of Charges will be used when an enlisted man loses, damages, or destroys public property placed in his custody. It is used when the man involved admits the loss, damage, or destruction of the property and consents to the charge against him, or when an approved Report of Survey assesses against the man a charge for lost, damaged, or destroyed property. (For a detailed treatment of the use of this form, see TM 12-250.)

d. Where facilities of a personnel section are available, the personnel officer should be consulted on questions pertaining to the use and preparation of these forms.

CHAPTER 5

OVERSEAS MOVEMENTS

		Paragraphs
Section	I. Preparing to leave home station	62-69
Section	II. Movement by motor convoy	70-75
Section	III. Movement by rail	76-84
Section	IV. Combination convoy and rail movement	85
Section	V. Arrival at port of embarkation	86-88
Section	VI. On board the transport	89-90
Section	VII. Arrival at port of debarkation	91-92



SECTION I — PREPARING TO LEAVE HOME STATION

62. INITIAL PROCEDURE. **a. Orders.** On receiving warning orders that the laundry company will proceed to a port of embarkation for overseas duty, company officers must institute immediate and vigorous action to complete all unfinished company business and prepare their organization for the move. Steps should be taken without delay to settle all company and personal accounts. In order to insure that the company will be ready to embark any time after it reaches the port, all personnel of the company should be furnished a copy of the War Department circular 333, 1942, as amended by War Department circular 361, 1942. Upon receipt of orders from higher authority, company orders may be prepared to cover the movement. Orders from higher authority must be presented when making arrangements with such agencies as the finance and the quartermaster offices. Such orders will specify:

- 1 Whether the movement is to be by motor or rail or both.
- 2 Number of troops participating in the movement.

3. Length of time the travel is to cover.
4. Type of ration to be drawn for feeding the troops.
5. Equipment to be taken with the troops.
6. Liquid coffee money (when authorized).

b. Inspections. Inspections should be held as soon as possible to determine whether all enlisted men have the prescribed allowance of clothing and equipment. Excess items should be turned in to the issuing agencies, and all deficiencies should be made up as quickly as possible.

c. Post property. Post property will be turned in and credit memorandum receipts obtained, except where a custodial officer is employed to handle post property. In that case, the administrative details involved will be handled by that officer.

63. RECORDS. **a. By whom prepared.** When a company has available the facilities of a personnel section, much of the administrative work necessary before movement to a port of embarkation will be accomplished under the direction of the personnel officer. Most of the administrative work outlined in the following paragraphs will be accomplished by the personnel section (if one is provided), and company officers will be concerned with only as much of the detailed work as is specifically indicated or requested by the personnel officer. When the company has no personnel section, it will be forced to complete or prepare all of the records, rosters, and reports required for the anticipated movement.

b. Covering inoculations and vaccinations. (See also paragraph 3c(4), AR 30-1190). **1. Preparation of immunization registers.** (a) Immunization records of enlisted men and officers should be checked as soon as it is known which particular vaccinations and inoculations will be required before embarkation. A list will be prepared in quadruplicate, showing with each name the inoculations or vaccinations required. One copy of this list will be held by the commanding officer of the company, and three will be forwarded to the surgeon concerned.

(b) A schedule will be arranged for the inoculations and vaccinations, and, upon completion, the surgeon will turn over a copy of it to the company commander.

(c) Upon receipt of the schedule, the company commander will be responsible for sending individuals of the company to the surgeon, as stipulated in the schedule. A commissioned officer, or a responsible noncommissioned officer, should be in charge of the groups as they are sent to the surgeon.

(d) Upon accomplishment of the inoculations and vaccinations, the surgeon will prepare a certification on three copies of the list provided him. An individual in charge of the group will take the duplicate and original copies to the company commander. (Where a personnel officer is involved, the duplicate copy will be delivered to him.)

(e) The surgeon will retain the triplicate copy of the list, and from it will complete individual immunization registers, the originals of which will be forwarded to the company commander (or to the personnel officer).

2. Vaccination certificate required. (See also paragraph 6, AR 30-1190). Upon the basis of the certified list received from the surgeon, the company commander or personnel officer will prepare a certificate in triplicate as shown below. One copy of the certificate will be forwarded to the surgeon at the port of embarkation, one is retained for presentation to the transport surgeon aboard ship, and the remaining copy is retained for the company file.

Company _____, _____ nth QM Bn.

Fort _____

Date _____

I certify that the records of Co. _____, _____ nth QM Bn. indicate that all members of this organization have been vaccinated against smallpox, typhoid, para-typhoid fever, and yellow fever as required by existing regulation, with the following exceptions:

Name	Serial No.	Defect	Reason
Doe, John _____	600000	No yellow fever vaccination	Not available

(signed) JOHN BLANK
Captain, QMC, Commanding.

3. Completion of immunization records. (See also paragraph 3c(4), AR 30-1190). The immunization records, in the enlisted men's service records, should be completed from the immunization registers prepared by the surgeon, as indicated in paragraph b1 above.

c. Covering physical inspections. (See also 3c(5)(a), AR 30-1190, and paragraph 14, AR 40-100, as changed by WD Cir. 31, 1942). Arrangements will be made to have all personnel of the company receive a physical inspection within forty-eight hours before departure

from the home station. After the examination is completed, the surgeon will prepare a certificate of accomplishment, and forward it to the company commander (or to the personnel officer). The company commander (or the personnel officer) will then forward the certificate to the surgeon at the port of embarkation. This certification and the one relating to immunization (see paragraph above) will be forwarded together when practicable.

d. Emergency addressee card. The Emergency Addressee Card (WD AGO, Form No. 43) having been prepared in accordance with WD Cir. No. 338, 1942, will be verified by the organization commander with each individual in order to ascertain the accuracy of the information entered thereon. The date of verification and the initials of the verifying officer will be entered on the space provided therefor. These cards will be delivered by the commanding officer of the company (or personnel officer) to the personnel officer at the port of embarkation.

64. LISTS AND ROSTERS. Before movement to a port of embarkation, or prior to embarking, four separate rosters, covering the personnel of the company, are required for different purposes.

a. Machine records list. (See also paragraph 3c(10), AR 30-1190). The company commander (or the personnel officer) will prepare a complete roster, in quadruplicate, on WD AGO Form No. 309, covering all individuals who will accompany the unit. All copies of this list will be taken to the port of embarkation, one copy to be delivered upon arrival to the port personnel officer for machine record purposes, and two copies to the commanding officer of the overseas discharge and replacement depot. The fourth copy will be retained for file purposes.

b. Roster for assignment to accommodations aboard ship. (See also 2a, b, AR 30-1215). A second roster, typewritten, will be prepared in triplicate, as indicated below. All three copies will be taken to the port of embarkation and turned over to the officer in charge of the port. This must not be done more than twenty-four hours before embarkation so that port authorities can make the necessary assignments to accommodation on ship-board.

1. Names of officers and warrant officers will be arranged according to grade.
2. Names of enlisted men will be arranged alphabetically according to grade.
3. After the names listed in accordance with sub-paragraphs (1)

and (2) above, there must be shown the company to which each is assigned, and the arm or service to which each belongs.

c. List to check property aboard. **1.** A list will also be prepared for the superintendent, Army Transport Service, at the port of embarkation. This roster will list the names of individuals of the company, indicating after each name the baggage pertaining to the individuals, the baggage to be designated as "trunk," "trunk locker," "chest," "barracks bag," or other definite designation of the baggage. It will be used to manifest and check the property aboard the transport (paragraph 5, AR 55-410).

Note: The 30 series of Army Regulations pertaining to transportation is being renumbered as the 55 series. When it is impossible to find a reference to either series, a check should be made against the other. Some of the 55 series herein referred to have not yet been distributed.

2. Organization commanders will certify, on all such packing lists of property, that no unauthorized articles, or inflammable materials, are included in the troop baggage.

Note: Oils, cleaning materials, and such other articles prescribed by regulations and orders, will be packed separately and plainly marked, in order that they may be separated from other property when placed aboard ship. (Paragraph 7, AR 55-410.)

d. Lists to check personnel aboard. These lists will be prepared on WD QMC Form No. 169 (Passenger List) some time before embarkation, in conformity with instructions contained in AR 30-1185, and presented to the commanding officer of the port of embarkation. The company commander will have the lists prepared so that:

- 1** Names will be numbered consecutively on each of the first and second class passenger lists, each list beginning with No. 1.
- 2** Troop class passenger lists will be numbered consecutively, beginning with No. 1.
- 3** The names of officers on duty with the company will be included in the lists of first class passengers. The names will be shown in parentheses, but will not be given a number (e.g., Captain John Doe, 107 QM Laundry Co., Comdg.)
- 4** Attached personnel will be shown under the notation "attached" under remarks.
- 5** The names of individuals not on duty with a company nor attached to it, in the proper place on the passenger list, with a notation under remarks showing the purpose or occasion of their presence.

- 6 If a name is canceled, the number will be left vacant, and if additions are made, additional numbers will be used.
- 7 Colored troops will be shown as such.
- 8 Entries will be double-spaced. The designation of the organization will be entered at the head of the passenger list and will not be repeated after the name of each individual. The destination will be shown, *if authorized by higher authority*.
- 9 The designation of the nearest relative, or person to be notified in case of emergency, will not be shown.
- 10 When a name must be eliminated from a list because of absence for any cause, a line in red ink or indelible pencil will be drawn through the name; above the line containing the name will be entered in red ink or indelible pencil the cause, place, and date of absence. These entries are made on all copies of the passenger list, and initialed in ink, by the officer authorizing the notation.
- 11 Sufficient copies will be prepared and distributed, in accordance with paragraph 7A, AR 30-1185.

65. REPORTS. a. To Machine Records Unit. Immediately before breaking camp, unit and individual Reports of Change (WD AGO Form 303), covering departure from the home station, will be forwarded to the Machine Records Unit serving the port of embarkation.

b. To The Quartermaster General. A report will be sent to The Quartermaster General showing a list of all organizational equipment, with its marks, designations, weights, and cubic measures (paragraphs 3a(1) and (2), AR 30-1190).

c. To the port commander. On departure from the home station, the unit commander will report to the port commander (by air mail letter, radio, or teletype) detailed information regarding the manner in which the unit and its equipment will move to the port of embarkation (see paragraph 3a, AR 30-1190). The contents of this report will be discussed in the section dealing with rail and convoy movements.

66. DISPOSITION OF UNNECESSARY FILES. Records should be disposed of as authorized by the following WD Circulars: 203, 1941, and 20, 34, 63, 89, 101, 132, and 152 of 1942. All organizational and individual records not necessary to the conduct of

current administration should be boxed by general classes and marked to indicate the unit to which they belong. Lists should be prepared (in triplicate) to show the location and contents of each box of records. Boxes are stored at the last permanent station, and the original and one copy of the list of such stored records are forwarded to The Adjutant General, the third copy being retained.

67. PREPARATION AND DELIVERY OF EQUIPMENT FOR TRANSPORT SHIPMENT. (Preparing equipment for shipment by rail or motor vehicle is discussed in sections II and III of this chapter.) All articles of property and equipment which can be crated or packed will be so prepared. Containers should be sufficiently strong to withstand the great amount of handling to which they will be subject.

a. Each container or unpacked item will be plainly marked as shown below. Each item of freight shipped in a secret movement will be numbered with consecutive numbers:

To: Port Quartermaster

(Name of Port) Port of Embarkation

For _____ (Organization)

Force (insert code name)

Contents _____

Cubic Weight _____

Weight _____

b. The following supplies and equipment will be marked additionally with the words "STORAGE FOR DISCHARGE.....FIRST": gasoline, oil, lubricants, hand-operated gas pumps, cargo trucks, tentage, ranges, mosquito bars, and headnets (if required), water bags, tropical helmets (if required), minimum additional organizational property required, initial at oversea destination, baggage, and personal baggage.

c. Tables of Basic Allowances organizational equipment, initial and maintenance supplies (except "hand" and "heavy" baggage accompanying troops) should be shipped in time to be at the port of embarkation not more than seventy-two hours prior to sailing time.

d. Cargo freight, including all types of vehicles shipped by rail or convoy, should be dispatched so as to arrive at the port of embarkation not less than three nor more than five days before the scheduled date of sailing. (Tools for vehicles will be boxed or otherwise secured in each vehicle.)

68. BAGGAGE CONSIDERATIONS. A baggage officer and detail should be appointed, and the time of reporting should be designated in a company order as soon as the company is alerted in anticipation of a movement.

a. The Baggage Officer. The baggage officer on a convoy movement may also be designated as the supply officer within the meaning of AR 55-410.

Note: (1) Hand baggage is transportable as checkable baggage allowance, free of charge, by commercial carriers, as referred to in paragraph 19, AR 30-920 and comprises the barracks bag and individual equipment as enumerated in paragraph 87: Equipment to Accompany Troops. See also paragraph 12c, AR 30-1190, paragraph 2c, AR 55-410, and FM 21-15. The weight of checkable baggage, allowance free, varies between railroads. It is important to find out what the allowance is.

(2) Heavy baggage includes all items not checkable baggage, and will be shipped as freight on a bill of lading as set forth in paragraph 10, AR 30-945, where the troop movement may be by train. In general, heavy baggage items are: trunk lockers, officers' bedding rolls, organizational mess as prescribed and authorized, and other essential items of organizational equipment (see paragraph 12d, AR 30-1190). Heavy baggage and freight will be handled by port authorities at the port of embarkation. Reserve rations, as carried in bulk, should accompany heavy baggage.

b. The Baggage Detail. The baggage detail consists of approximately three per cent of the company's strength (paragraph 12, AR 55-410). It will be the duty of this detail to supervise the loading and unloading of baggage at the home station and the loading and securing of heavy freight. It will segregate troop baggage from rail or convoy shipments upon arrival at the port of embarkation (paragraph 3c(7), AR 30-1190). Heavy baggage and freight will be loaded aboard ship by port authorities. The baggage detail will ordinarily accompany heavy baggage and cargo freight when it is shipped by rail in advance of the troop movement, when it accompanies the troops on an all-rail movement, or when it is transported by motor convoy either with or in advance of the troop movement. Upon arrival at the port of embarkation, this advance detail will report immediately to the port commander. The baggage officer, or senior member of the advance party, will be provided with a copy of a report of The Quartermaster General referred to in paragraph 65b above.

69. EQUIPMENT TO ACCOMPANY TROOPS. (See also paragraph 3c(8), AR 30-1190.) The entire personnel of the com-

pany should be instructed before departure from the home station that they will take the following equipment only aboard the vessel to which they are assigned:

- a.** Arms and equipment which the enlisted man carries on his person in the field.
- b.** Such additional articles of clothing as are required in existing orders, or are absolutely essential for the use of the enlisted man during the voyage.

SECTION II — MOVEMENT BY MOTOR CONVOY

70. GENERAL. The quartermaster laundry company, semimobile, is not provided with sufficient organic transportation to move its full complement of personnel and equipment simultaneously. In view of this fact, it may be assumed that the company will not often move as a unit by motor convoy, especially where the length of the movement exceeds 500 miles. However, if the company is called upon to move in convoy, additional transportation facilities (cargo trucks) will be provided by higher authority. Four or five 2½-ton cargo trucks, or the equivalent thereof, will be required for this purpose. The following instructions cover specifically a motor movement to a port of embarkation only. However, they apply equally well to field exercises, except that where reference is made to authorities at the port of embarkation, it will be interpreted to read, "home station."

71. REPORT TO PORT COMMANDER. The report referred to in paragraph 65c is to be transmitted at this time to the port commander, when the movement to the port of embarkation is by motor convoy. The report will include the following detailed information (see also paragraph 3a(1) (b), AR 30-1190):

- a.** Route, place, and date of long halts or bivouacs, with the duration of such halts indicated.
- b.** Number of serials, number of vehicles in each, date and hour of departure and scheduled arrival of each serial at designated reception points.
- c.** Number of officers.
- d.** Number of enlisted men, by grades.
- e.** Number of pieces of wheeled equipment and types thereof.

72. TECHNICAL CONSIDERATIONS. Technical considerations involved in a convoy movement are fully explained in FM 25-10, Motor Transport. Comprehensive study should be made of this manual, and any other official publications on motor movements should be consulted. Matters pertaining to vehicle loading and prescribed loads should have been studied during the unit training period. The subject will not be further developed in this handbook. Special attention is directed to the march graphs and tables, covered in FM 25-10. A march graph should be prepared to cover the movement.

73. SUPPLY—THE VITAL CONSIDERATION. One of the major considerations in a troop movement is the supply problem. The commanding officer of a "separate" company on an independent movement can expect little help from outside sources on this matter. To facilitate supply, the company commander should designate one of his junior officers (perhaps the supply officer) as the "advance agent." He will be charged with procuring initial supplies at the home station, establishing refilling points along the route of march, purchasing additional supplies as they are required, and making billeting arrangements. The officer designated should immediately report to the station finance officer for instructions, and should make arrangements to be appointed "agent officer." The class of "agent officer" to which he will be appointed is either "A" or "B" (as the circumstances require), but in most instances "B." As a "B" agent, he will be bonded in the sum of \$5,000 (\$10,000 for ranks of captain and above). He will also make the necessary arrangements for securing from the post quartermaster a sub-authorization to obligate funds where cash payments are not required or authorized.

74. SCOPE OF CASH PAYMENTS. The officer who is a class "B" agent will be instructed by the finance officer that he may make cash payments only (no checks). In general, the funds are provided for the prompt settlement of incidental bills which cannot be anticipated. (See paragraph 4, AR 35-6300.) Funds allotted to class "B" agents, however, may cover any or all of the following disbursements:

- a.** Payrolls of enlisted men.
- b.** Vouchers for commutations of rations.
- c.** Vouchers for payment of funds for liquid coffee.

d. Vouchers for procurement and services when creditors (such as small dealers who do not conduct a regular business) require immediate settlement.

75. BIVOUACS. Under no consideration should an attempt be made to travel more than 200 miles a day. Average convoy speed should be about 25 miles per hour. The individual vehicle should not exceed 35 miles per hour. Overnight stops should be anticipated so that troops arrive at the bivouac area between three and four o'clock in the afternoon. Arrangements for billeting and mess facilities should be made with the military establishment along the route of march. Free billeting, however, may not always be possible, in which case camp sites and buildings must be rented.

SECTION III — MOVEMENT BY RAIL

76. GENERAL. The most frequent method of moving the quartermaster laundry company within the zone of the interior is by means of rail transportation. Information concerning rail movements may be found in AR's 30-930, 30-940, 55-155, 55-135, and 55-145.

77. REPORT TO PORT COMMANDER. In the case of a rail movement, the report to the commander at the port of embarkation (referred to in paragraph 65c) will contain the following information (see 3a(1) (a), AR 30-1190):

- a.** Railroad routing.
- b.** Date and hour of departure.
- c.** Date and hour of scheduled arrival at the port of embarkation, giving the name of such terminal. (Effort should be made to accomplish arrival during morning hours, in order to avoid movement through congested areas in the afternoon.)
- d.** Number of officers.
- e.** Number of enlisted men by grade.
- f.** Number, types, and weights of all wheeled equipment.
- g.** Weights in cubic measure of baggage not required by troops during the voyage; such baggage is classified by type of container in which it

is shipped. The report, forwarded in duplicate, should reach the port commander at least six days before the date and hour of sailing.

- **h.** All other equipment should be reported separately in the same manner as indicated in (g) above.

78. REQUEST FOR RAILROAD FACILITIES. As soon as the commanding officer of the laundry company receives orders to move his unit by rail, he will estimate his requirements and submit the necessary information in letter form to the local transportation officer in order to procure adequate transportation facilities. The letter will cite the orders or instructions authorizing the movement and will show, by separate groupings, the name of the organization, the number of officers, enlisted men, and vehicles, and the quantity of public property, authorized and checkable personal baggage, together with the date and place of entraining and the destination. (Paragraph 2, WD Cir. 192, 1942).

79. REPORT REQUIRED FOR SEPARATE FREIGHT SHIPMENTS. When a freight shipment is made separately from a movement of troops, the report to the commanding officer of the port referred to in paragraph 65 should include the following information (See also paragraph 3c, AR 30-1190):

- a.** Routing, rail and/or water.
- b.** Car numbers, box or flat, the general description of contents, such as "rations," "motor vehicles," etc.
- c.** Expected time of arrival at the port of embarkation or other designated unloading point.
- d.** Bills of lading and shipping papers as prescribed in AR 55-155, AR 30-950, and AR 55-145.

80. TRANSPORTATION REQUESTS. (AR 55-110). If only his company is involved, the company commander may act as both the commander of troops and the train transportation officer. The shipping transportation officer will provide him with one request for rail transportation and one for sleeping car accommodations where required. In view of the many other responsibilities falling to the commanding officer, it is recommended that he appoint a junior officer to act as the train transportation officer. This officer will make a record of the transportation requests as prescribed by paragraph 15, AR 55-145. The train transportation officer will, if possible, arrange with

the train conductor to have the transportation requests taken up by the latter on the train. (Paragraph 15d, AR 55-145). If such an arrangement cannot be made, he must obtain tickets by presenting the transportation requests to the station agent prior to departure. As soon as practicable after departure and prior to the accomplishment of the transportation requests, the train transportation officer and the train conductor will jointly count the passengers.

81. BILL OF LADING. A bill of lading will be prepared by the train transportation officer and turned over either to the agent of the last carrier or to the transportation officer at the destination. (AR 55-150, and paragraph 10, AR 55-145.) As soon as possible, the company commander will furnish the shipping transportation officer a list and a statement of the weight of the property to be shipped. Checkable baggage will not be included on the bill of lading, because it is an allowance transported free by the carrier. The carrier's tariffs must be consulted to ascertain what constitutes checkable baggage and the allowance thereof. Vehicles to be shipped in straight carload lots will be described by their appropriate names on the bill of lading together with the required detailed descriptions and weights (AR 55-150). FM 101-10 may be consulted for information on the weight and description of all vehicles except tractors and trailers. The trailer will be described as the mobile laundry unit, W-950-QM 3270. The weight of the unit is 11 tons, and the dimensions are given in paragraph 95. The manufacturer's operation and service manual should be consulted for description of the tractor truck. Descriptions of Autocar models are given in references cited in paragraph 109. Where heavy baggage and freight are shipped previous to or separate from the troop movement, such articles will be packed and marked in accordance with AR 55-155.

82. ENTRAINING. The commanding officer of the company will take over the duties of the entraining officer as prescribed in paragraph 12, AR 55-145, or will detail a junior officer for that duty. In order that the entraining may proceed without confusion, delay, or interruption from traffic, the commanding officer will make or cause to be made a reconnaissance of the approaches to the entraining point. The duties of the entraining officer are, in general, to superintend the loading of both the property and personnel which will move in that train. He will take the necessary steps to prevent delay in the loading of freight and baggage, and is responsible for seeing that it is properly

done. He will collect the checkers' lists prepared by the officer who has directly supervised the loading of the property; and he will transmit them to the shipping transportation officer without delay. He will proceed to the entraining point in advance of the command, and will supervise the assignment of troops to the cars. He will allow only one entrance of each car to be used, and will see that men entering the car proceed directly to their seats.

83. SPECIAL CONSIDERATIONS ON TROOP MOVEMENT. The commanding officer, in addition to the requirements outlined above, will be responsible:

- a.** For reporting the exact time and date of departure to the Chief of Transportation, Traffic Control Division, Washington, D. C. Upon arrival at the destination, he will also report the exact time and date of arrival. In his report, he will indicate the movement by routing number only, without further identification in each case.
- b.** For appointing a mess officer who will supervise the preparation and serving of the meals.
- c.** For issuing orders to his company in conformity with paragraph 14e, AR 55-145.
- d.** For inspecting railway equipment which has been vacated, with the object of determining whether any railway property has been damaged or unlawfully removed. He will report the result of this inspection in writing to the commanding officer of the port of embarkation.
- e.** For the proper preparation of certificates as required by paragraph 14f, i, and m, AR 55-145.

84. DETRAINING. Train schedules should provide, whenever practicable, for arrival at the destination during daylight. Troops will be notified of the hour of arrival in ample time to enable them to be prepared to detrain promptly. The officers and the guard detail will detrain first. The baggage detail will be left to unload and bring up the property. Where the camp is quite distant from the detraining point, arms may be stacked and the property unloaded by the entire command. The noncommissioned officers or enlisted men who acted as checkers when the property was loaded will, if practicable, be assigned to the same duty in unloading.

SECTION IV — COMBINATION CONVOY AND RAIL MOVEMENT

85. GENERAL. A combination convoy and rail movement will cause the commanding officer of the laundry company few difficulties which have not already been anticipated. Heavy baggage and freight of the company can easily be accommodated by the five 2½-ton cargo trucks and trailers. A driver and an assistant driver will be assigned to each vehicle, a mess detail will be appointed, and a convoy officer will be placed in charge of the detachment. Because of the small size of the group (about 55 individuals in all), it will not be necessary to have an "advance agent." But arrangements for supplies, messing facilities and bivouac sites (as discussed in section II of this chapter) will have to be made. Transportation requests for the remaining personnel of the company (about 245 individuals) will be requested in accordance with instructions in paragraph 80. For a movement requiring more than 24 hours travel time, three units of the field range should accompany troops traveling by rail; one unit should accompany the motor convoy. At the discretion of the company commander and the shipping transportation officer, either one or two baggage cars may be furnished to provide messing facilities for the troops traveling by rail.

SECTION V — ARRIVAL AT PORT OF EMBARKATION

86. IMMEDIATE CONSIDERATIONS. Upon arrival at the port of embarkation, the company officers of the laundry company traveling separately will find it necessary to take the following steps:

- a.** Officers and enlisted men required to serve as messengers, personnel clerks, advisers, and in other capacities should be made immediately available to the port commander and his staff.
- b.** Prepare and forward to the port commander, immediately upon arrival, a unit report of change covering the arrival of the company (in accordance with paragraph 11c, AR 30-1190), and continue to forward reports of change to the port commander daily not later than 1000 as long as the company is at the port of embarkation. On the date of departure, a unit report of change accompanied by a passenger list (see paragraph 64) certified as to correctness and completeness will be forwarded to the port commander.

- c.** Copies of the rosters mentioned in paragraph 63 will be delivered as indicated.
- d.** At least one company officer should be designated to accompany the organization to the barracks or quarters.
- e.** Arrangements will be made with the commander of troops or port commander (as the case may be) to furnish such guard details as he may request both before and after embarkation.
- f.** Arrangements will be made with the port surgeon to accomplish incompletely inoculations and vaccinations of personnel. Any physical examinations required by current regulations (including the physical inspection of the entire company in accordance with paragraph 14, AR 40-100 as changed by section III, WD Cir. 31, 1942) must be made within 48 hours before embarkation.

87. SPECIAL EMBARKATION CONSIDERATIONS.

- a.** It may be necessary to separate the troops from their hand baggage. Therefore, mess kits, toilet articles, underwear, socks, and similar items will always be carried in the haversack and roll.
- b.** Working details sent ashore will be under the command of a commissioned or noncommissioned officer, who will be responsible for checking the detail off and on the ship.
- c.** The location and the regulations governing the use of latrines, washrooms, water fountains and other facilities on the transport will be pointed out to the company before they board the transport.
- d.** The complete contents of AR 55-430 covering the conduct of passengers on transports will be read to the company.
- e.** The first guard for transport duty will be marched on board and posted under the direction of the new transport officer-of-the-day when the command is marched to the pier for inspection and check.

88. CONDITION OF MOTOR VEHICLES ON ARRIVAL AT THE PORT.

See appendix 6, FM 25-10, Motor Transport, March 12, 1942, for inspection report of vehicles shipped by rail or water. Motor vehicles should arrive at the port of embarkation in excellent mechanical condition and completely serviced.

SECTION VI — ON BOARD THE TRANSPORT

89. MISCELLANEOUS CONSIDERATIONS ON BOARDING THE SHIP. At the hour prescribed in the embarkation order, the company will be marched to the pier in the order that names appear on the passenger list. (See paragraph 64). In order that this may be done as expeditiously as possible, the company should be formed in this order several times before embarking. Ordinarily the company will be checked aboard by number rather than by name. The company commander will designate one of his commissioned subordinates to march the company on board and conduct it to its quarters. He, himself, will remain on the gangplank and assist in checking and verifying the company passenger list as members of the company board the vessel. The entire command must be ordered to remain in quarters until the whole company is on board and specific orders permit individuals to leave their quarters. No members of the company should be allowed ashore unless they have been assigned to some work detail there. The company commander will at this point turn over the certificate of vaccination (mentioned in paragraph 63b (2)) to the transport surgeon. The attention of the entire command should be directed as soon as practicable after boarding the ship to AR 55-435 which deals with the routine of passengers on transports.

90. COMMAND RESPONSIBILITIES ABOARD TRANSPORTS. A duly appointed commander of troops and a transportation officer will cooperate with the master of the transport in issuing all orders governing the administration of troops during the time they are on the transport. Inasmuch as the commanding officer of a quartermaster laundry company will very seldom be the commander of troops (usually a line officer) or transport quartermaster, the manner in which the command is authorized to function need not be explained. Commanding officers of the quartermaster laundry companies will cooperate with the commander of troops and ship authorities in every way possible.

SECTION VII — ARRIVAL AT PORT OF DEBARKATION

91. DEBARKING. Upon arrival at the port of debarkation, each organization will leave the transport as a unit. One individual from each organization will leave the ship first and place the company standard at a point designated by a debarkation officer or his repre-

sentative. Unless circumstances are exceptional, troops arriving on a ship which docks after 1800 will not disembark until the following morning. After debarkation is completed, roll will be called from the passenger list and verified by the debarkation officer; he will then furnish the commander of the organization with a release from the pier, stating that the organization has been satisfactorily checked. All hand baggage will be tagged and piled together as soon as possible after the transport docks so that it can be removed immediately.

92. FATIGUE DETAILS. All details will debark with the body of troops, and will remain with their organization until after the required check has been made and they are called for by the debarkation officer. Each organization may be required to furnish the following details:

- a.** A police detail, which will report to the police officer on board the ship.
- b.** A baggage detail, which will report to the supply officer. The detail will remain with him until assorting of all baggage and troop property is completed and they are relieved by the proper debarkation officials.

CHAPTER 6

LAUNDRY EQUIPMENT

	Paragraphs
Section I. General	93-94
Section II. The laundry trailer	95-107
Section III. Equipment—The tractor truck	108-109



SECTION I — GENERAL

93. COMPANY EQUIPMENT. **a.** The equipment of a semimobile laundry company consists of organizational equipment, organizational clothing, individual clothing and equipment and, when the unit is in garrison, items of post property.

b. Company property other than organizational equipment is discussed in Chapter 4, section III. Only the organizational equipment used in the job of washing clothing under field conditions will be discussed in detail. Major items of organizational equipment are the following:

- 16 semitrailers, 2-wheel, van-type, laundry.
- 16 trucks, 4- to 5-ton, tractor.
- 5 trucks, 2½-ton cargo.
- 5 trailers, 1-ton, 2-wheel, cargo.
- 1 truck, ¼-ton (company headquarters—for company commander).
- 1 truck, ¾-ton weapon carrier (company headquarters—repair truck).
- 16 tents, storage.
- 64 baskets, laundry canvas, 8-bushel, without rollers.
- 32 tables, laundry, sorting, 3' x 8'.
- 64 lots, marking pins.

c. For a complete list of all items of individual and *organizational* clothing and equipment, see equipment chart, appendix G.

94. SECTION EQUIPMENT. The section, of which there are eight in a laundry company, is the basic operating unit. Each section has as part of its organic equipment, two semimobile laundry units, composed of two semitrailers with equipment installed thereon, and two 4- to 5-ton tractor trucks. In addition to this equipment, each section is supplied with the following necessary auxiliary items:

2 tents, storage:

1 marking and sorting (or classification).

1 storage of clothing and supplies, and for administrative purposes.

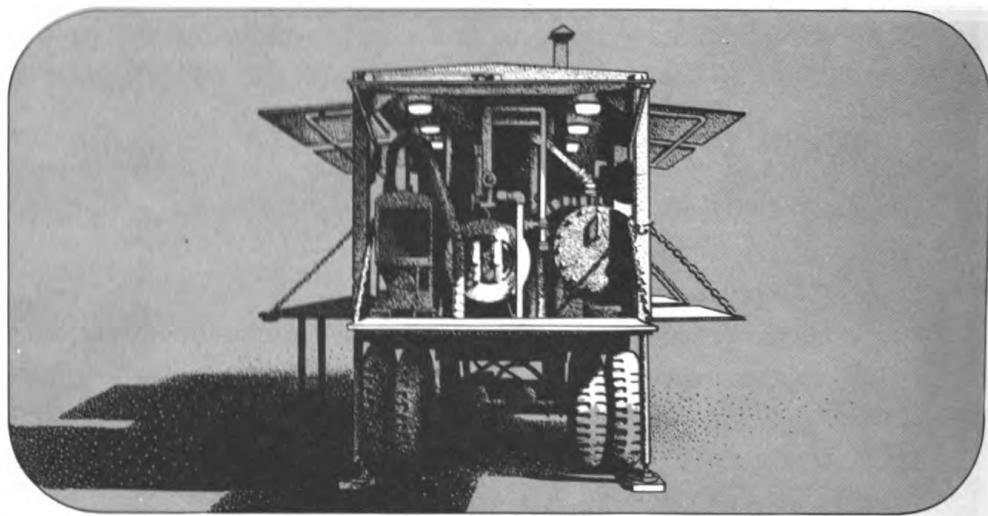
8 baskets, laundry, canvas, 8-bushel, with rollers.

4 tables, laundry, sorting, 3' x 8'.

8 lots of marking pins: lots A, B, C, D, E, F, G, H.

SECTION II — THE LAUNDRY TRAILER

95. GENERAL DESCRIPTION. Each laundry trailer is 22 feet long, 8 feet 4 inches wide, and 6½ feet high. The important parts of the structure are the van-type body, the rear wheel assembly, the landing gear, the stand-jacks, and the fifth wheel. The operation of the fifth wheel, stand-jacks, and landing gear should be thoroughly understood by all personnel.



THE LAUNDRY TRAILER

FIGURE 10

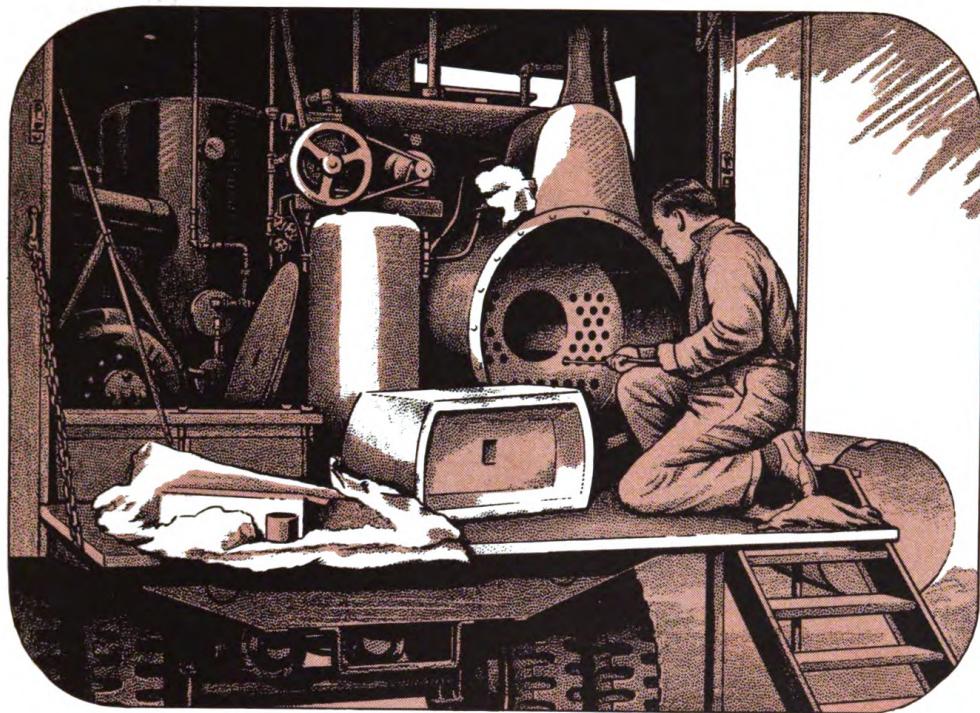


FIGURE 10 (Continued)

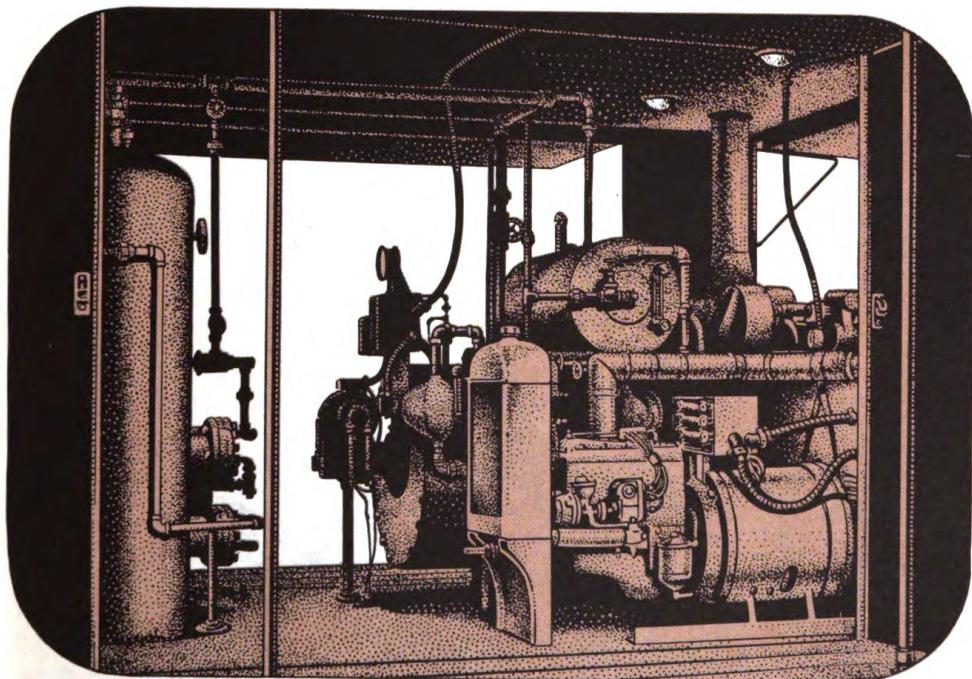


FIGURE 10 (Continued)

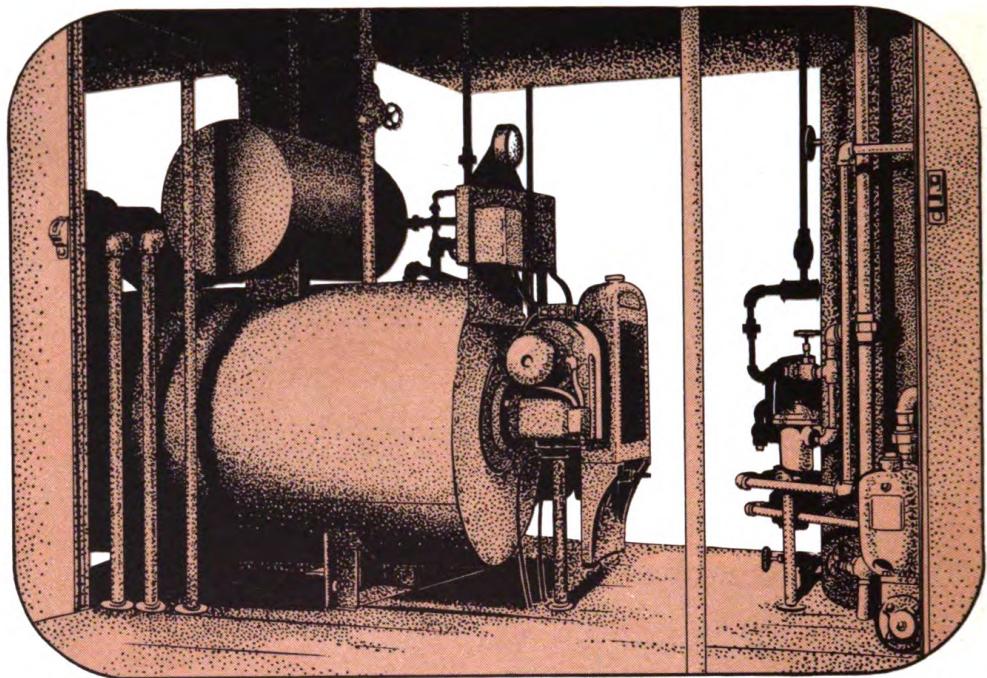


FIGURE 10 (Continued)

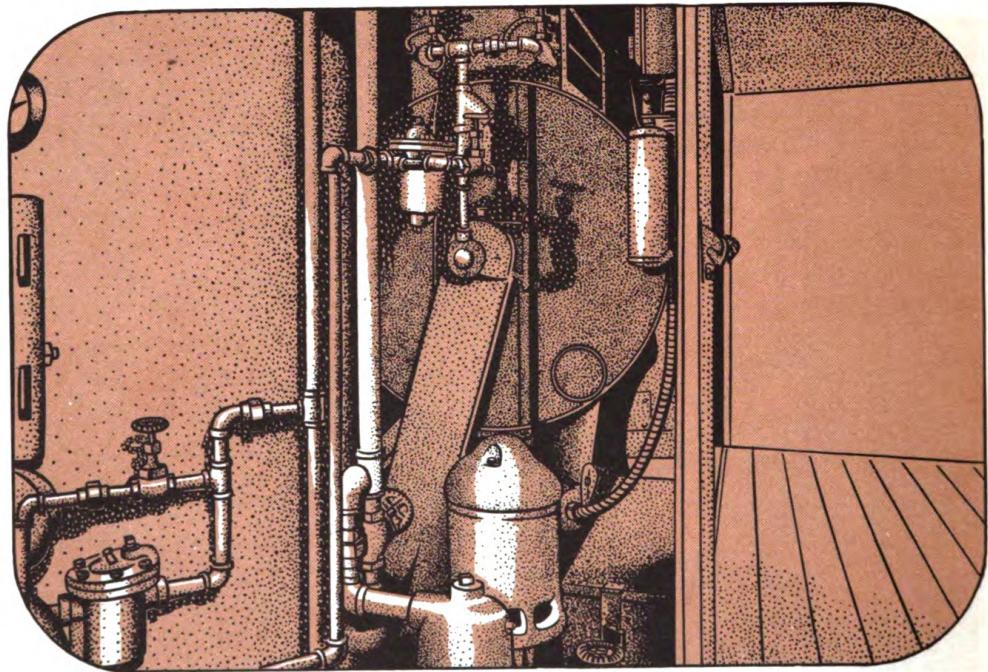


FIGURE 10 (Continued)

96. THE FIFTH WHEEL. The tractor is connected to the semitrailer by means of a fifth wheel. A heavy steel plate, known as the upper fifth wheel plate, is securely attached to the under side of the front end of the semitrailer frame. It serves as a bearing on the front-end support when the trailer is coupled to the tractor. The front edge of the plate is turned up approximately 45° to form a skid on which the lower fifth wheel slides when the trailer is being hitched to the tractor. The center of the upper fifth wheel contains the king pin by which the trailer is pulled. The lower fifth wheel contains the movable parts of the fifth-wheel assembly and supports the semitrailer load thrust on the tractor. (See TM 10-560, Chassis, Body and Trailer Units, for a more detailed explanation of the mechanics of the fifth wheel.)

97. THE LANDING GEAR. The landing gear is a retractable support for the front end of a semitrailer when uncoupled from the tractor. It has two leg members attached to the trailer chassis by pivot pins. Two small wheels, called dolly wheels, are attached to the ends of the legs to facilitate moving the trailer about when it is uncoupled from the tractor. A crank which raises and lowers the landing gear is also a part of the assembly. The height to which the landing gear lifts the front end of the trailer above the ground can be varied by adjusting the telescopic leg members.

98. THE STAND-JACKS. These jacks act as supports for the four corners of the trailer, but will not support its total weight except for a few moments in setting it up or in preparing it to move. Their primary function is to provide a means of leveling the van. (See paragraph 36b (3).) They are of different types, but those on the Troy model fit into wells set in the trailer corners. From these wells they can be drawn or retracted by inserting the pin in holes drilled at an upper and a lower point along its length. A screw mechanism at the bottom of the leg provides for adjustments.

99. THE LAUNDRY EQUIPMENT. The laundry equipment with which each trailer is furnished consists of the following items (see figure 11):

- *1 washer, 30" x 30", standard open-end type.
- *1 extractor, 20".
- *2 dry tumblers, 36" x 30".
- *1 hot water heater, 180 gal.

- *1 boiler, 15 h. p., max.
- *1 electric generator, 12.5 K. V. A., gasoline-engine driven.
- *1 cold water pump, motor driven.
- *1 cold water pump, portable, gasoline-engine driven.
- 200 feet hose, 3 inch, sewer (four 50-ft. sections).
- 225 feet hose, 1½ inch, intake (four 50-ft. sections, one 25-ft. section).
- 1 strainer, hose.
- 1 air compressor (installed only in Troy model serial Nos. 1-141 inclusive).
- 2 fuel tanks, 40 gal.
- 1 set of spare parts (see Appendix C, Part I).
- 1 set of tools (see Appendix C, Part II).
- 1 drain shelf, or box.
- 1 boiler return system, with boiler feed pump.

Note: Items preceded by asterisks (*) are the essential functional machines with which each laundry trailer is equipped. They are discussed in more detail in the paragraphs immediately following. Diagrams and general instructions covering the operation and servicing of this equipment, and of the trailer as a whole, are given in TM 10-351, Operating Instructions and Parts Lists, Mobile Laundry Units, September 21, 1942. The manufacturer's manual covers only the Troy model trailer. Two other types of laundry units, the American and the Hoffman, are currently in operation. Since there is only a limited number of the two latter types in existence, and since the operation of all laundry trailers is similar in nature, this handbook considers only the Troy type. It is to be understood that the dimensions of the Hoffman and American type trailers and the machinery with which they are equipped may vary from those shown in this handbook. In the following paragraphs repeated reference will be made to TM 10-351.

TYPICAL LAUNDRY TRAILER FLOOR PLAN

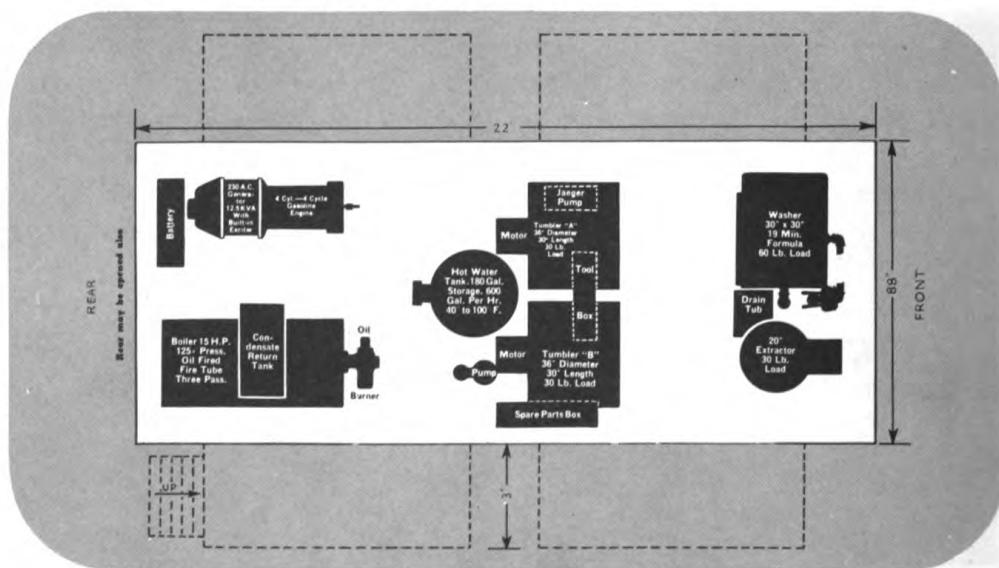
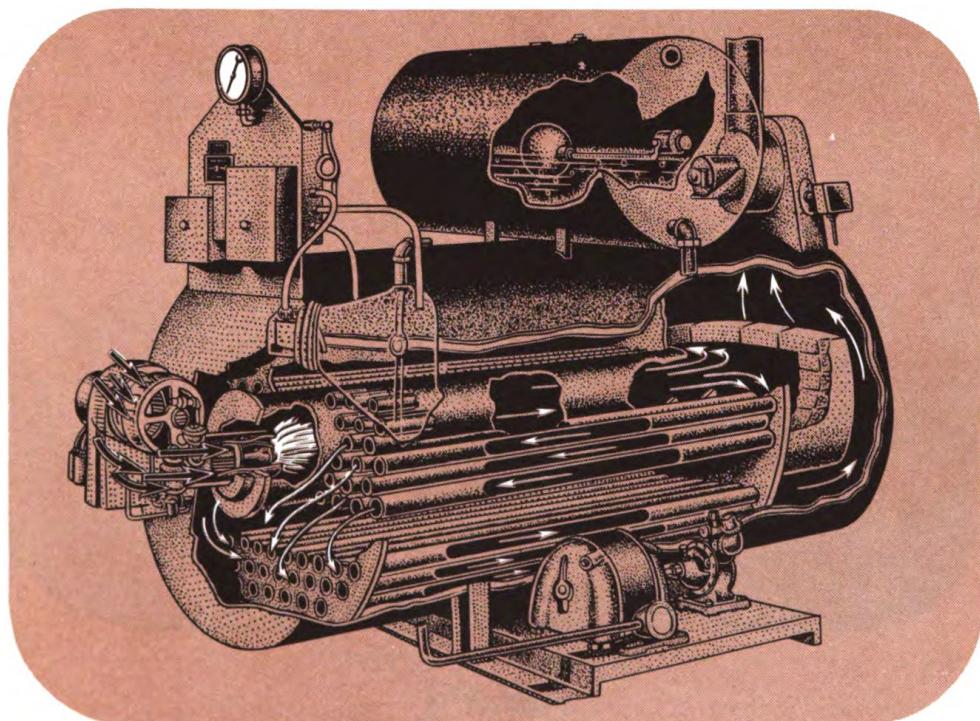
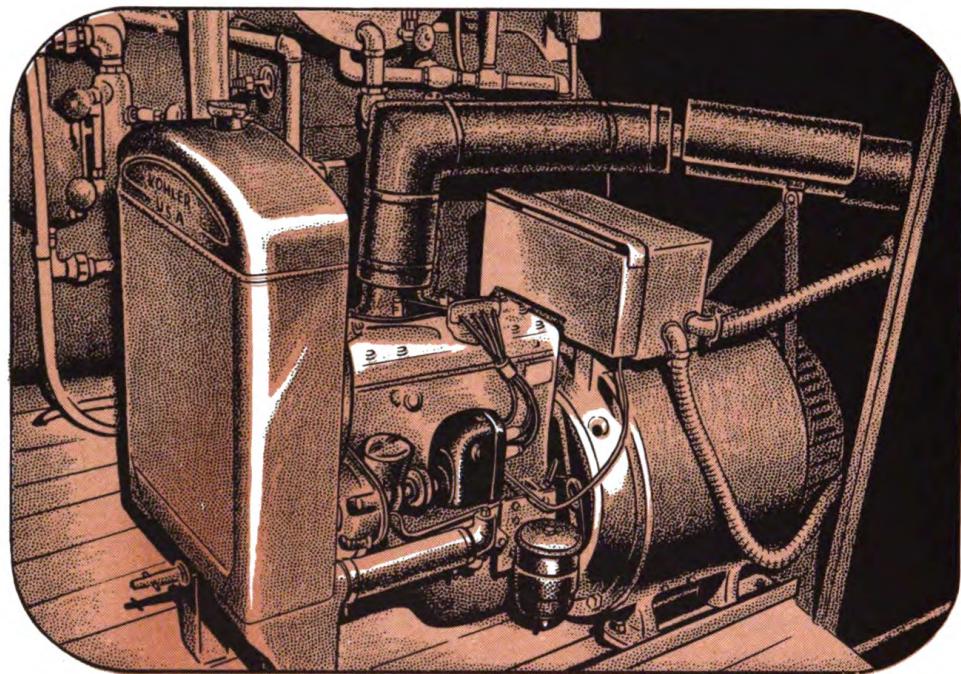


FIGURE 11

100. THE BOILER. This is a 15-horsepower, horizontal, return tube, oil-fired boiler, complete with a condensation return system, an oil burner, safety appliances, controls, and other devices. It is designed for 100-125 pounds steam working pressure. Its total weight is approximately 1500 pounds, and it occupies a floor space of 8 feet by 2 feet, 3 inches. It has an overall height of about 3 feet, 2 inches. (See figures 11 and 14.) It is built on a firetube principle, which, because of its unique construction, combines compactness with maximum operating efficiency. Combustion gases pass through the firetubes three times, with the result that the full heat content of these gases is utilized before being discharged into the air. *It is important that controls be regulated so as to provide the exact amount of air required to support complete combustion.* If the volume of air intake is improperly controlled, the efficiency of the boiler is lowered, and smoke produced with the resultant carbon, which eventually clogs the tubes completely. The control of smoke is important, since an undue amount may easily reveal the location of the laundry plant to the enemy aerial observer. The boiler is completely automatic, and is as fool-proof as possible. (For general operating instructions covering the complete boiler unit and for service instructions covering the boiler, oil burner, and condensate system, see pages 17 to 22, TM 10-351. See also diagrams and parts lists, page 16 and pages 23 to 31.)

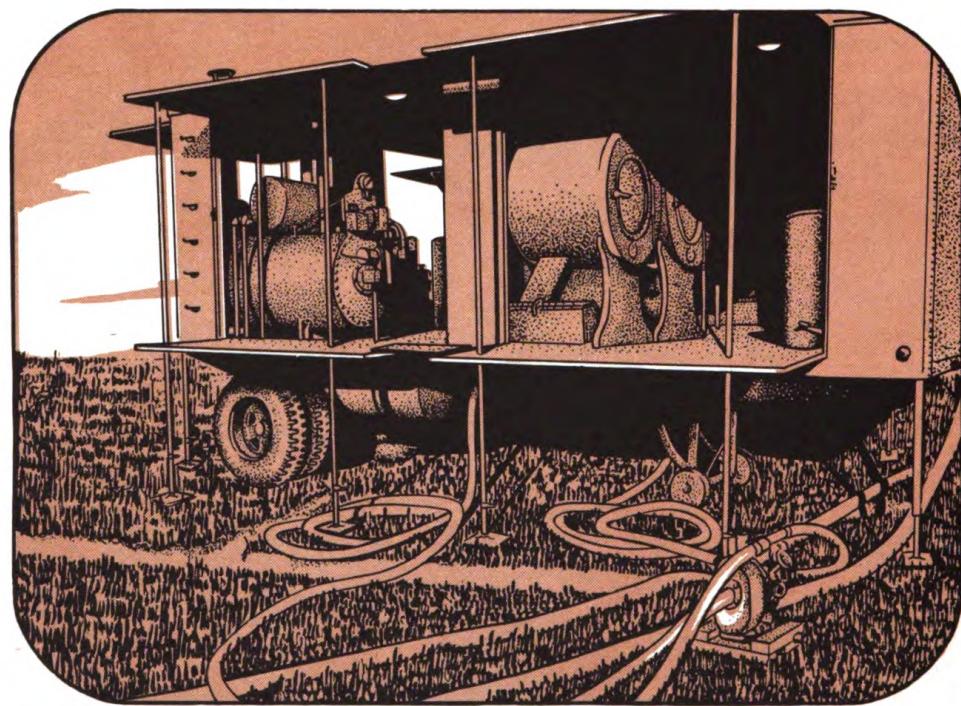
THE BOILER





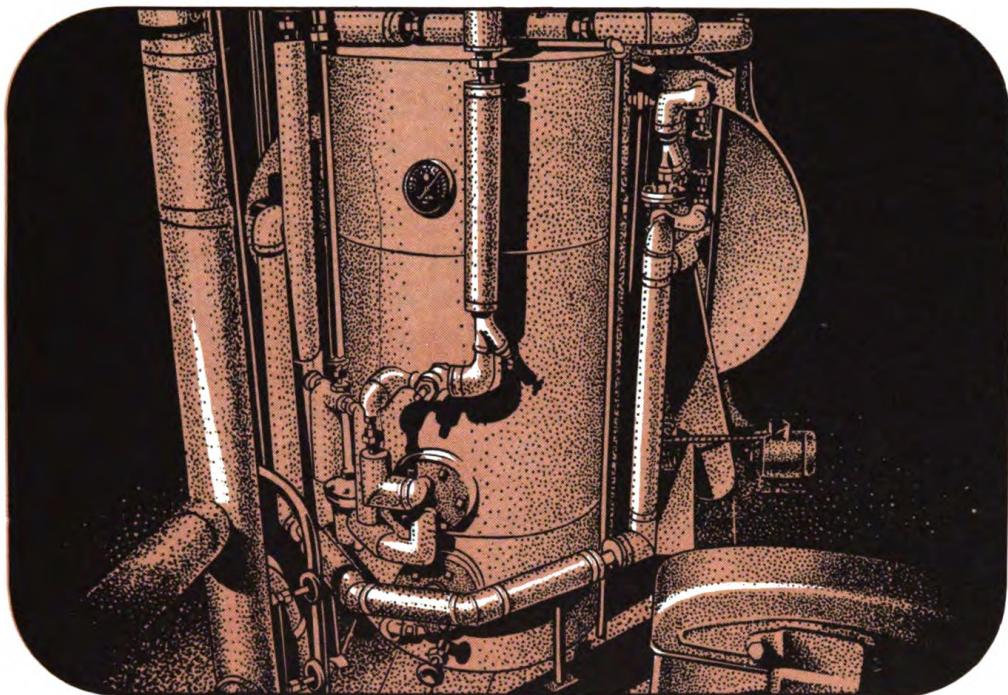
THE ENGINE-GENERATOR SET

FIGURE 12



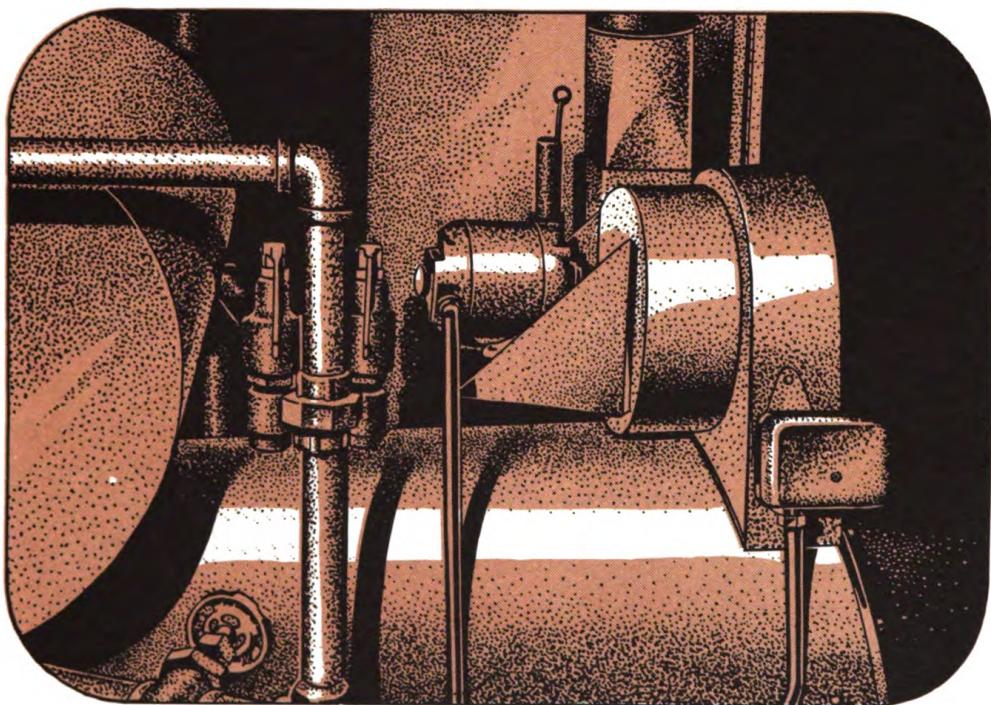
GASOLINE PUMP SETUP

FIGURE 13



THE HOT WATER HEATER

FIGURE 14



THE BOILER EXHAUST SYSTEM

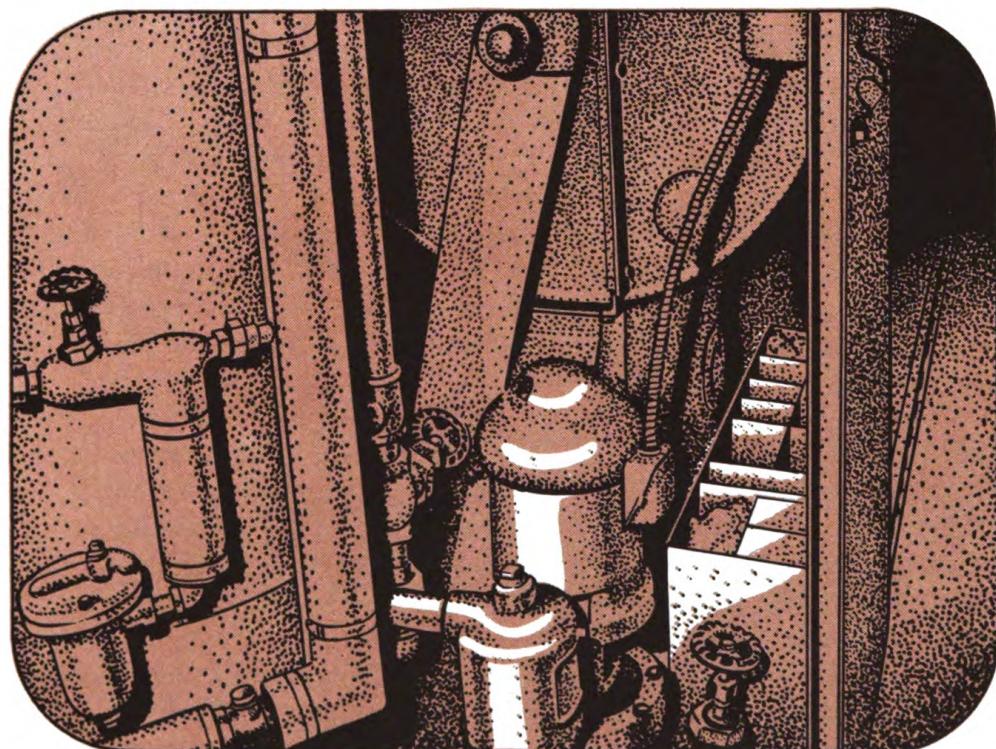
FIGURE 15

101. THE ENGINE-GENERATOR SET. The engine-generator set consists of a gasoline-motor driven, alternating-current generator, which can develop a capacity of 12.5 K. V. A. The engine has four cylinders, and is directly connected to the generator to form a single operating unit. (For a good visual description of the generator set, see the pictures on page 38, TM 10-351.) The generator provides a three-phase 60-cycle of 230 volts, which is sufficient for the mechanical operation of the trailer and its lighting system. The engine is equipped with a battery-operated self-starting winding. The battery is re-charged while the generator is in operation. (For starting and general operating instructions and an inspection check list, see pages 39 to 42, TM 10-351. See pages 43 to 55 for diagrams, parts, and parts lists.)

102. THE HOT WATER HEATER. The hot water heater tank is a 180-gallon, vertical-type tank, designed for 100-125 pounds per square inch water working pressure. The heating unit is a steam coil consisting of seamless copper tubing made into U bands. The coil is large enough to heat 600 gallons of water an hour to 100° Fahrenheit, assuming the water source to be 40° Fahrenheit. A second steel coil of the same size and material is installed in the hot water tank and connected to the return line from the tumblers. Steam circulating through the two sets of coils heats the surrounding water. The amount of steam is regulated by the use of a thermostatically controlled valve. When the water temperature falls below the thermostat setting, the valve opens and allows steam to enter the coils. When the temperature of the water rises above the control limit of the thermostat, which at that point automatically turns off the pressure-reducing valve, the source of steam is shut off. Steam from the tumblers is returned to the water tank through the second set of coils mentioned above, and from there back to the boiler. This process continues as long as the tumblers are in operation, and hence is not thermostatically controlled; but the heat from this source does not greatly affect the water temperature. (See pages 70 and 71, TM 10-351, for instructions on the operation and cleaning of the heater, and for a diagram of the unit. Parts lists are also shown. A study of the schematic piping diagram shown on page 5, TM 10-351, is helpful.)

103. THE WATER SUPPLY PUMPS. The two water supply pumps in the trailer are of different types, one a gasoline-driven auxiliary, and the other an electric-motor driven, permanently installed pump.

a. The electric pump. The electric pump is the main one, and is mounted on the trailer. The driving shaft is direct from the motor to the pump, and is connected between the two units by a flexible coupling. The pump is a self-priming, centrifugal-force type, capable of pumping 25 gallons of water a minute (where the lift from the water source is 15 feet over a total horizontal distance of 50 feet). The pump is connected to the water lines of the washer and to the cold water inlet of the heater through the makeup or condensate tank. (See TM 10-351, page 5, for the schematic piping diagram, and figure 11 of this handbook.) But the intended function of this pump is not to lift water from a distant source (i.e., stream or lake), since an auxiliary gasoline pump is provided for that operation. The prime purpose of the electric pump is to maintain cold water pressure constant throughout the trailer so that a plentiful supply is available at any point. Since the pressure in the water system depends upon the speed of the impeller, the pump turns at the relatively fast speed of 3450 revolutions per minute. (See operating instructions and parts list for the electric pump, pages 75 and 76, TM 10-351. These pages also contain two detailed diagrams of the pump.)



ELECTRIC PUMP (FLOOR CENTER)
SPARE PARTS CHEST (FLOOR RIGHT)

FIGURE 16

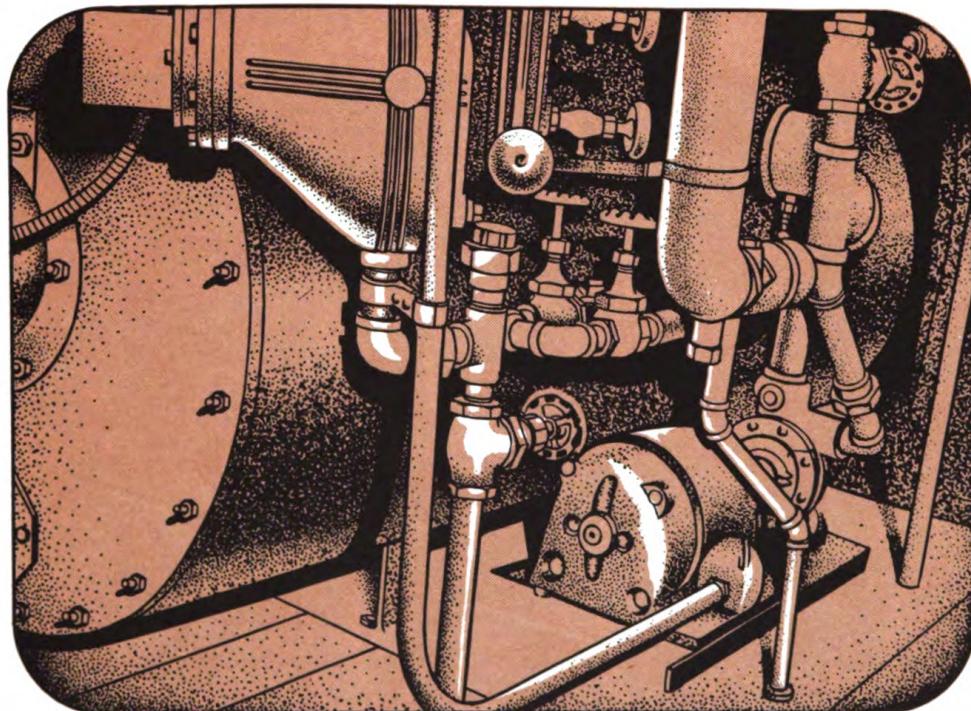
b. The auxiliary pump. The main purpose of the engine-driven, auxiliary pump is to feed water to the main pump when the source of the water is more than 50 feet away. The engine operating the pump is a single-cylinder, gasoline engine which, together with the pump, has a combined weight of about 100 pounds. The unit can easily be carried about by two men. Its normal position will be as close to the water source as possible, and it thus forms a connection between the short section of hose running to the water and the longer section connected to the trailer. (For diagrams of the engine-driven pump see pages 78 and 79, TM 10-351. Starting, operating, and servicing instructions are also given.)

104. THE WASHER. The washer is a standard 30 by 30 inch commercial laundry type, motor-driven by belt connection. (See page 109, TM 10-351.) This unit does the actual washing. It consists of a perforated metal cylinder called the "cylinder," which revolves inside an unperforated metal cylinder, known as the "shell." The shell being partially filled with soap and water, the actual washing process is achieved by means of ribs on the perforated cylinder which pick up the clothes and carry them nearly to the top. At this point, the clothes fall from the rib to the bottom of the cylinder, where the process is repeated when the next rib makes contact with the clothing. It is during this period that most of the "washing" occurs. The dropping action has a tendency to force the washing solution in and out of the clothing. The clothing receives friction from other clothing as well as from the cylinder. The cylinder changes direction every 7 or 8 rotations, and its speed is about 30 revolutions per minute. (For instructions covering the operation and servicing of the washer, and for diagrams covering the complete assembly (including motor), see pages 92-109, TM 10-351. See also parts lists.)

105. THE EXTRACTOR. The purpose of the extractor is to remove a major part of the water from the clothing before it goes to the tumbler. It consists of a basket 20 inches in diameter, which is motor driven by belt connection. It rotates on a vertical axis, and has a speed of about 1600 revolutions a minute. The basket is a perforated metal cylinder which revolves in a solid-metal outer shell. The clothes are whirled dry by centrifugal force, and the extracted water is caught and drained off by the shell through a floor drain. In five minutes the extractor will remove about 70% of the water. The capacity of the extractor is about half that of the washing unit, or approximately 30 pounds. The load from the washer requires 2 to 2½ extractor runs. Figure 18 gives a view of the extractor. (For operating and servicing

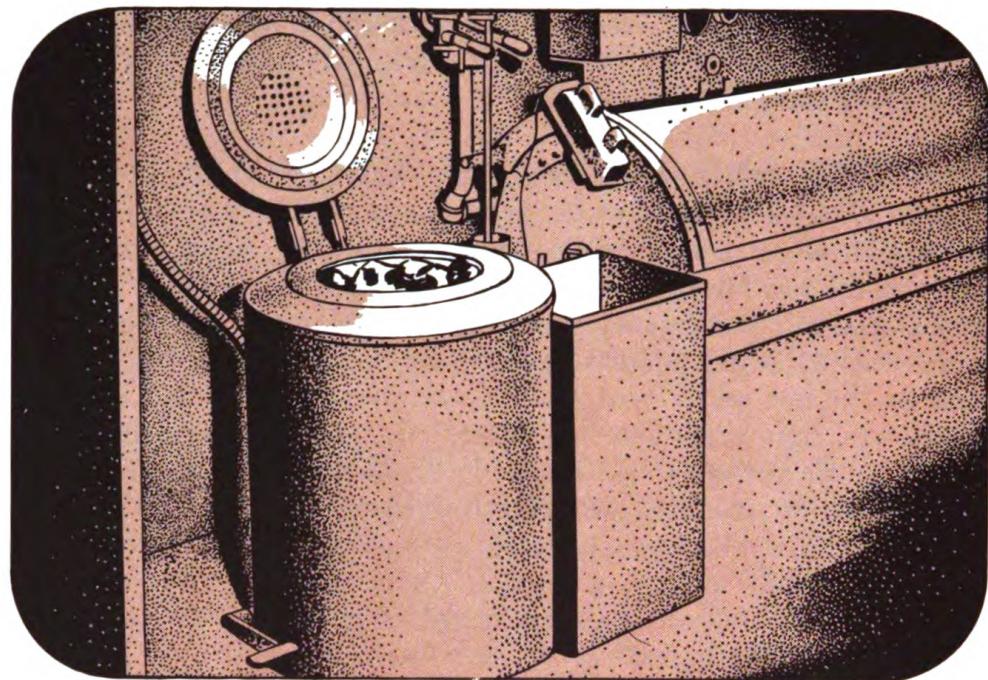
instructions see pages 61 and 62, TM 10-351. See also diagrams, pages 60, 62, and 64, and parts lists for motor page 63, for extractor page 65, and for allied parts, page 66.)

106. THE DRY TUMBLERS. The dry tumblers are the machines that dry the clothes. They are of standard open-end type, and consist of perforated, ribbed cylinders rotating inside outer shells. Each tumbler is 36 inches in diameter and 30 inches long. They are provided with a heating-coil unit of the copper-finned tube type. Heat is provided by steam circulating from the boiler through the tumblers back to the hot water heater, as was shown in paragraph 102. The heating-coil unit is set over the tumbler in such a manner that a fan located at the bottom of the assembly draws heated air down through the coil into the chamber through an opening in the outer shell. This process, together with the rotation of the ribbed cylinder, rapidly dries, shakes, and fluffs out the garments. Figure 19 shows a view of the two dry tumblers. (For diagrams, operating and servicing instructions, and parts list, see pages 89 to 95, TM 10-351.)



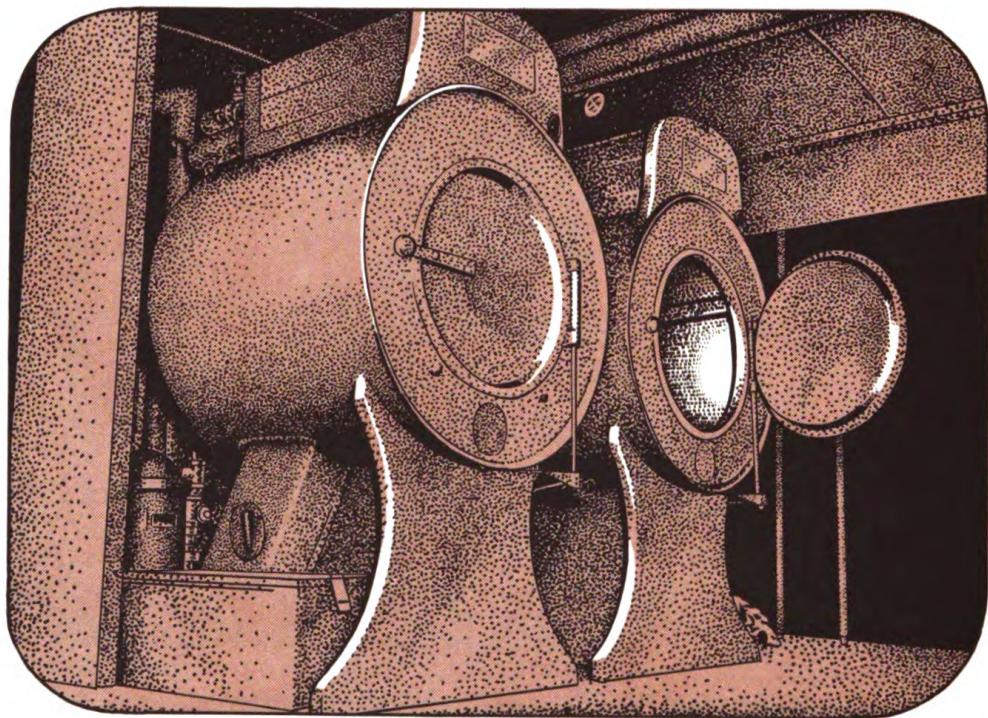
THE LOW WATER CUT-OFF (UPPER LEFT) AND
THE FEED WATER PUMP (ON FLOOR)

FIGURE 17



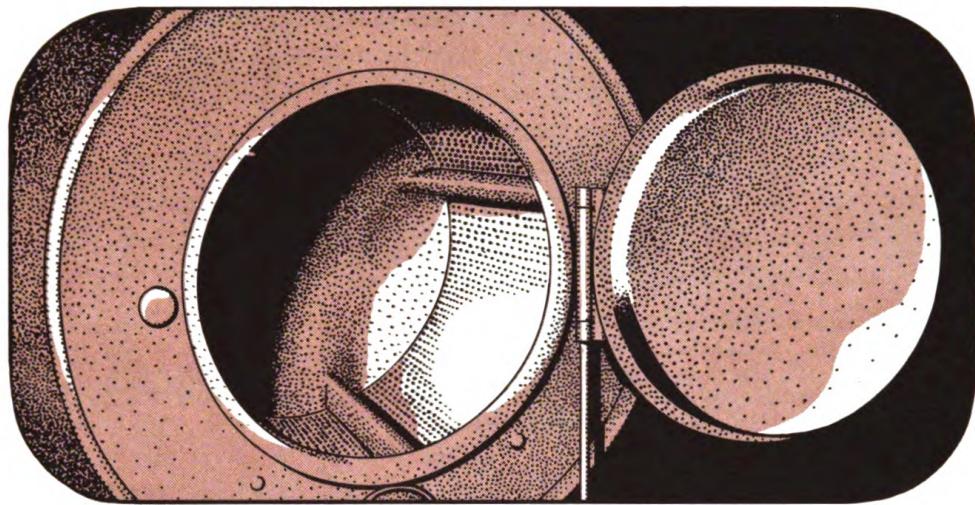
THE EXTRACTOR AND DRAIN TUB

FIGURE 18



THE DRY TUMBLERS

FIGURE 19



THE DRY TUMBLER (INSIDE)

FIGURE 20

107. MISCELLANEOUS PARTS. Other important items installed on the laundry trailer are not treated above, since these parts (listed below) are described in TM 10-351 and are self explanatory.

- ***a.** The compressor, page 33.
- b.** Hose, page 67.
- c.** Main switch panel, page 57.
- d.** Steam traps, page 85.
- e.** Gasoline and fuel oil storage tanks, page 87.
- f.** Temperature regulator, page 73.
- g.** Low water cut-off, page 30.
- h.** Feed water pump, page 31.

SECTION III — EQUIPMENT — THE TRACTOR-TRUCK

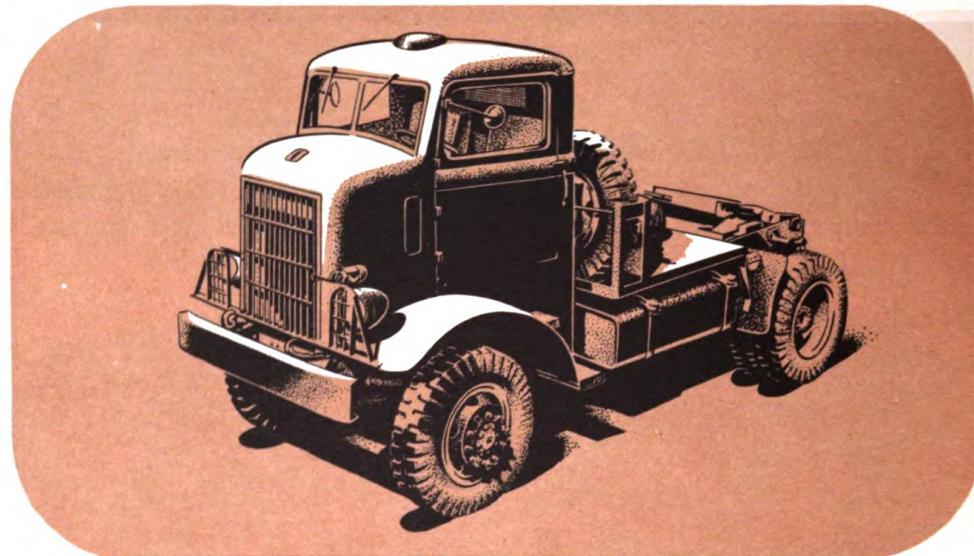
108. GENERAL DESCRIPTION. The motivating power for the laundry trailer is provided by a 4- to 5-ton, 4 x 4, 2 DT, tractor-truck (most frequently the Autocar, Model U-7144-T; see figure 21). This tractor-truck is the cab-over-engine type, with a wheelbase of 134½ inches and a total weight of 12,200 pounds. The power unit is a six-cylinder, Hercules engine, model Rx C. Cylinder bore is 4 $\frac{5}{8}$ ", with a stroke of 5½", for a total displacement of 529 cubic inches. The engine is rated at 51.3 horsepower.

*It should be pointed out that the only compressors installed on laundry trailers are to be found on the Troy models, serial numbers 1 to 141, inclusive.

109. OPERATION, MAINTENANCE, AND PARTS.

These aspects of the Autocar tractor-truck are fully covered in Technical Manuals 10-1116 and 10-1118, 10-1117, and 10-1119, Parts Lists and Maintenance Manuals respectively. Every prime-mover driver and the two mechanics should have a thorough knowledge of TM 10-1117 and 10-1119. Both mechanics should also be familiar with TM 10-1116 and 10-1118. Drivers should study all available material on the handling and care of tractor-trucks.

Note: The Fruehauf Trailer Company has produced a sound slidefilm entitled "The Man Behind the Wheel." A booklet reproduction of the film by the same title has also been published. Both film and booklet present a fine pictorial study of the principles of good tractor-trailer driving. Technical Manual 10-560, Chassis, Body, and Trailer Units, and Technical Manual 10-460, Driver's Manual, also offer some helpful suggestions. These manuals should be kept available at company or platoon headquarters at all times.



AUTOCAR MODEL U-7144-T

4-5 Ton, 4 x 4 Tractor-Truck

Wheelbase.....	134 $\frac{1}{2}$ "
Back of Cab to C/L of Rear Axle.....	90"
Back of Cab to End of Frame.....	121"
ENGINE.....	Hercules
Model.....	RXC
Cylinders.....	6
Bore.....	4 $\frac{5}{8}$ "
Stroke.....	5 $\frac{1}{4}$ "
Displacement—Cu. In.....	529
A.M.A Horsepower.....	51.3
WEIGHT	
Chassis and Cab, Fifth Wheel, Complete as Illustrated.....	Front 6780 Rear 5000 Total 11780

TIRES—9.00/20—10 Ply, Bus-Balloon, Mud and Snow Type Tread.

FIGURE 21

CHAPTER 7

THE FIELD LAUNDRY SERVICE IN THE THEATER OF OPERATIONS

	Paragraphs
Section I. Methods of employment	110-114
Section II. Miscellaneous considerations	115-117



SECTION I — METHODS OF EMPLOYMENT

110. GENERAL. The laundry has now arrived in the theater of operations. It may have come intact as a company or it may have arrived as a platoon or some other subunit of the company.

a. Separate platoons. The order covering the movement of the separate platoon from the zone of the interior to the theater of operations will have directed the partition of the parent organization. In some cases, the company headquarters section will have been directed to accompany the major portion of the company and to function as part of that unit rather than in its intended capacity of a company headquarters. A special equipment chart will have been prepared to provide the platoon with any property deficiencies it may have suffered by reason of detaching it from its parent organization. Therefore, the separate platoon will become a self-sustaining unit. In the theater, however, common practice will be to attach the separate platoon to another organization for supply, mess, and administration. This arrangement will be discussed in more detail in paragraph 115. The most probable

attachment of the separate platoon or other unit smaller than a company will be:

- 1 To a field hospital.
- 2 To a small task force.

b. The complete company. If the company has arrived on the scene of action intact, it will probably find itself employed in one of the following manners:

- 1 As a company working jointly with a sterilization company to provide baths and clean clothes for field troops.
- 2 As an organic part of a salvage repair battalion. In this instance, it will act as an intermediate station between the sterilization and the salvage repair companies, laundering all washable material passing between them.

111. ASSIGNED TO A FIELD HOSPITAL. (See also paragraph 2.) When a laundry installation is attached to a field hospital, it will in effect become an organic part of that establishment. Its administrative requirements will usually be taken care of by the personnel section of the hospital. The hospital will also normally provide for the mess and supply requirements of the laundry unit, although the platoon is equipped to be self-sustaining if necessary. Where a laundry unit is providing service for a Medical Corps installation, the bulk of articles to be laundered will be such items as sheets, towels, operating gowns and other similar articles. Sorting by color will usually not be necessary because such laundry is usually white. Ordinarily, hospital laundry will be handled on a bulk basis. But it may be desirable to classify the items as to kind for separate washing. Because numbered pins are not needed for bulk work, the chief employment of the markers will be to keep a record of the articles received and to make such classifications as may be deemed necessary. The folders and resizers, on the other hand, will be engaged in the work of folding and counting articles after they have been laundered. Thus they verify the previous count made by the markers.

112. ASSIGNED TO A TASK FORCE. The employment of a laundry unit assigned to a task force will be at the direction of the commanding general of the force. Since the problems of a task force are quite peculiar unto itself, it will not always be practicable to comply with basic doctrine covering the utilization of semimobile laundry facilities.

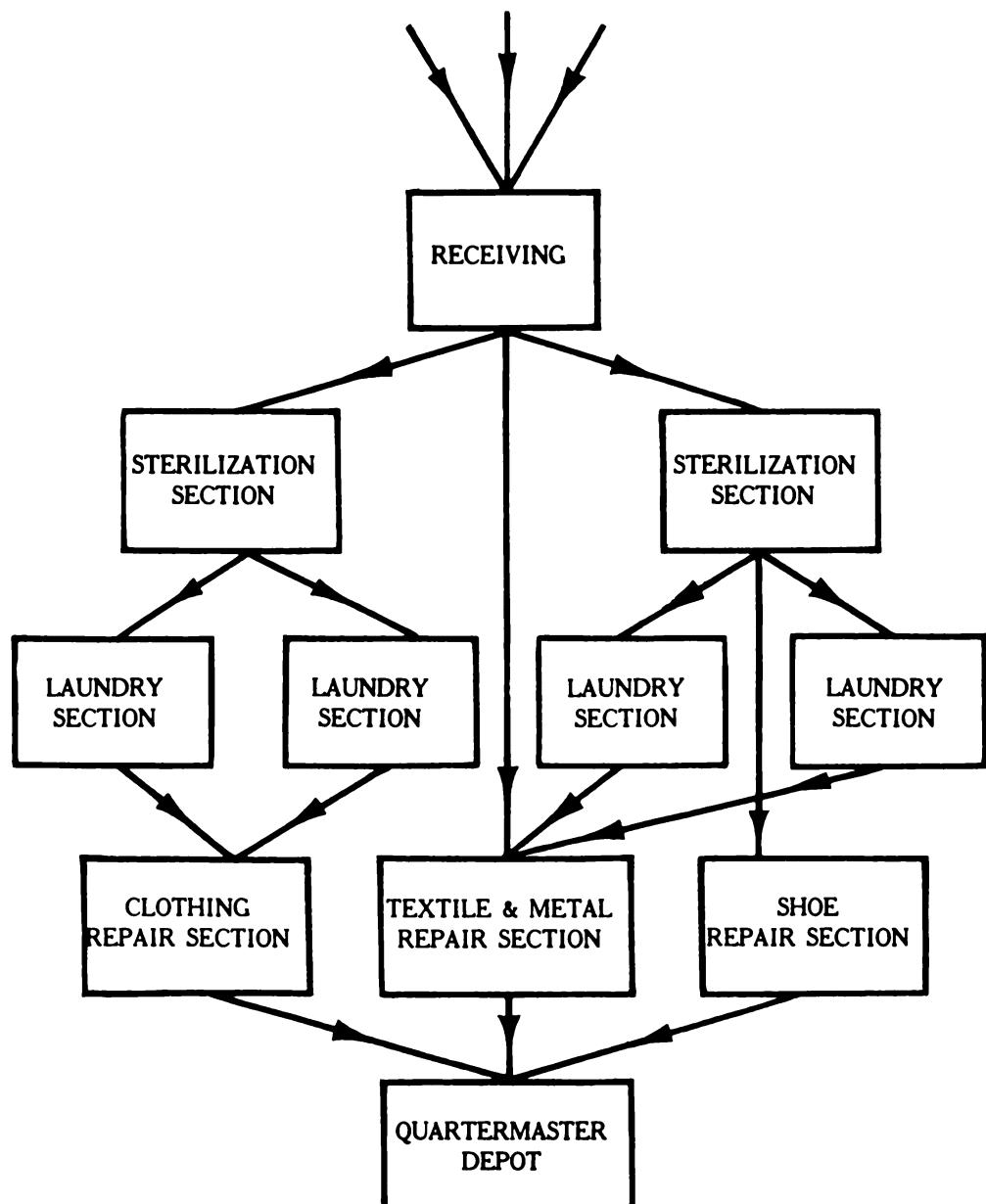
113. OPERATING IN CONJUNCTION WITH A STERILIZATION UNIT. (See paragraph 2.) Tables of organization covering the laundry company and the sterilization company are designed to give them comparable productive capacities. One platoon of the laundry company will handle the output of one sterilization section. In other words, the ratio of semimobile laundry trailers to sterilization trailers will be four to one (as indicated in figure 22). Ordinarily, the deployment of the laundry and the sterilization companies will be in this manner.

Men being processed through the sterilization unit will follow the path indicated by arrows with the solid shafts distinguished by the letter "P" and their clothes will be processed as indicated by arrows with the broken shafts in figure 23. Clothes taken from an individual in the undressing tent will not be returned to him, but will either be sent back to the clothing supply tent, or, if unserviceable, will be delivered at some point in salvage channels. After the clothing is sterilized by the sterilization unit, it is delivered to the laundry trailers in bulk. The handling of bulk clothing is fully explained in paragraph 39. Articles that have shrunk in the sterilizing and laundering processes will have to be resized.

114. OPERATING AS AN ORGANIC PART OF A SALVAGE REPAIR BATTALION. When functioning as part of a salvage repair battalion (see figure 24), two laundry platoons will normally operate in conjunction with two sterilization sections and one salvage repair platoon, consisting of a shoe repair trailer, a textile repair trailer, and one clothing repair trailer. This arrangement is shown diagrammatically in figure 22. In this process, salvage material will be turned over to the receiving tent of the sterilization section indicated at the top of the figure. From there, articles which may be sterilized will be sent to the sterilization section and turned over to a laundry section. After washing the articles, this section will deliver them to the appropriate salvage repair trailer. The path of the various articles through the salvage repair battalion setup is indicated in figure 22 and requires no further explanation. Washing of salvage material will obviously be done on a bulk basis. (See paragraph 39.) All articles, whether serviceable or unserviceable, will be turned over to the salvage repair company. No attempt should be made by laundry units to determine the reparability of any article.

**FLOW OF SALVAGE THROUGH OPERATING
UNIT OF QUARTERMASTER
SALVAGE REPAIR BATTALION,**

SEMIMOBILE



**FLOW OF WORK THROUGH
STERILIZATION—LAUNDRY INSTALLATION**

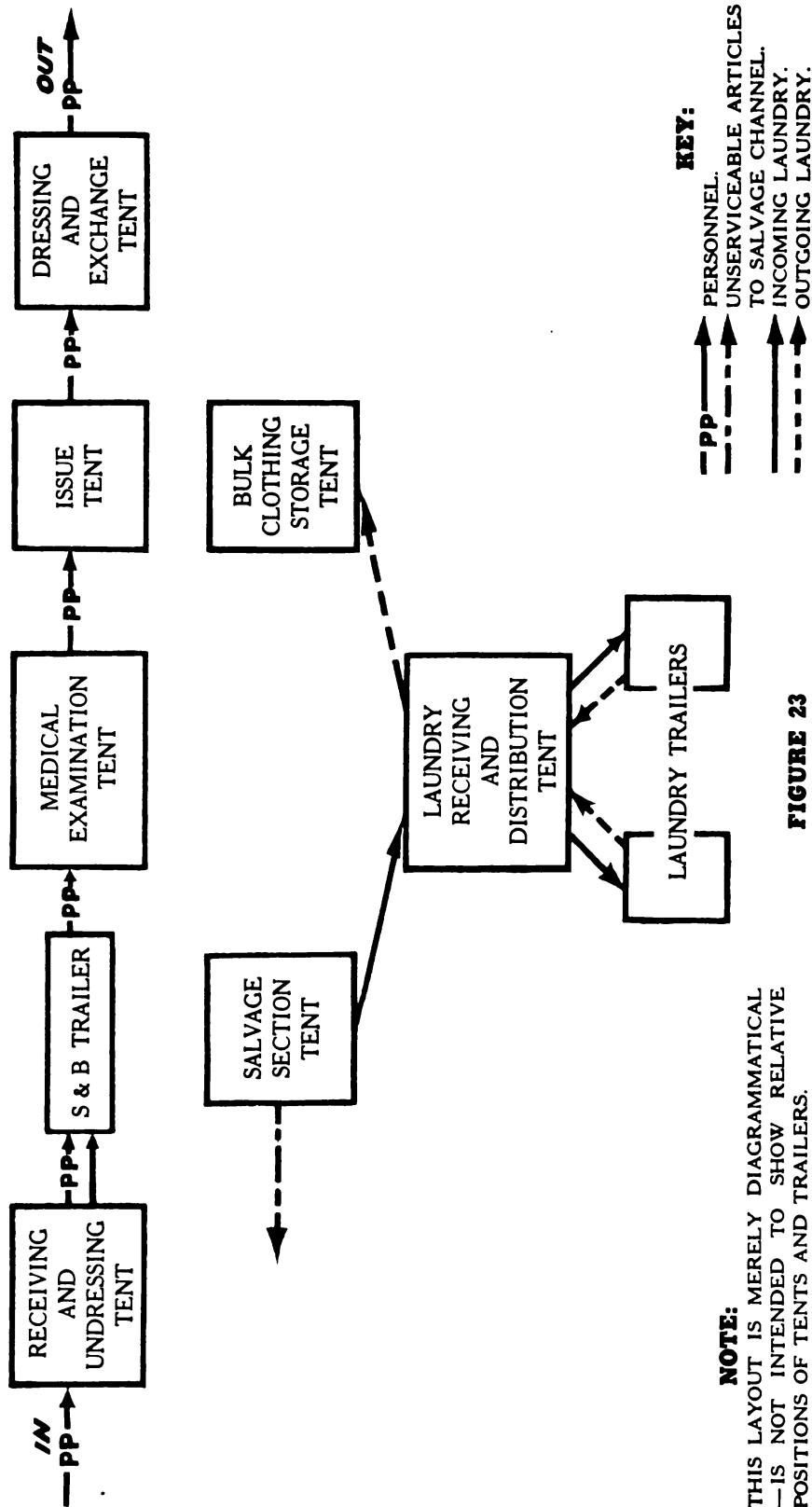


FIGURE 23

SECTION II — MISCELLANEOUS CONSIDERATIONS

115. PECULIAR PROBLEMS IN THE FIELD. **a.** When the component parts of a quartermaster laundry company, semimobile, are deployed (as on maneuvers or in a theater of operations), the various sub-divisions of the company (attached, as they will be, to GHQ, armies, corps, divisions or other similar units, or to field hospitals) must be assigned by the commander of the force or installation to a personnel section under his jurisdiction. Normally, he will also order the attachment of the laundry unit to another company of his command for supply, mess and company administration. Ordinarily, the attached laundry unit will not be required to send a clerk to the personnel section, nor will it be required to furnish other personnel (except, perhaps, cooks and kitchen police) for the performance of company housekeeping matters. In general, the housekeeping function will be carried on by personnel of the company to which the laundry subunit is attached. In situations where the component parts of the laundry company are sufficiently close together, company administrative matters may be cleared through the company headquarters. In other cases, the company may be broken up and spread over a very considerable area, which would make such an arrangement impossible. In these instances, each part of the laundry company will be more or less self-sufficient, and will be responsible, not to the commanding officer of the company, but to the higher administrative unit to which it is attached. Under the provisions of AR 345-5, the matter of promotions and reductions is a prerogative of the company commander. In the latter instance, it may be necessary for the company commander to delegate the power of making promotions and reductions to the commanding officers of the various platoons, within the allotment of grades provided them by the table of organization or arbitrarily by the company commander. It is important that the allotment of grades within the company does not exceed that specified by the table of organization. In some instances it may even be found expedient to send the company headquarters section into the field along with a platoon or less, with the idea that the company headquarters section will function as part of the platoon.

b. Service records and allied papers. When personnel are detached from the parent organization, their service records and allied papers will be administered by the platoon commander until the unit is assigned to a personnel section, at which time they will be turned over to that office.

QUARTERMASTER SALVAGE REPAIR BATTALION, SEMIMOBILE

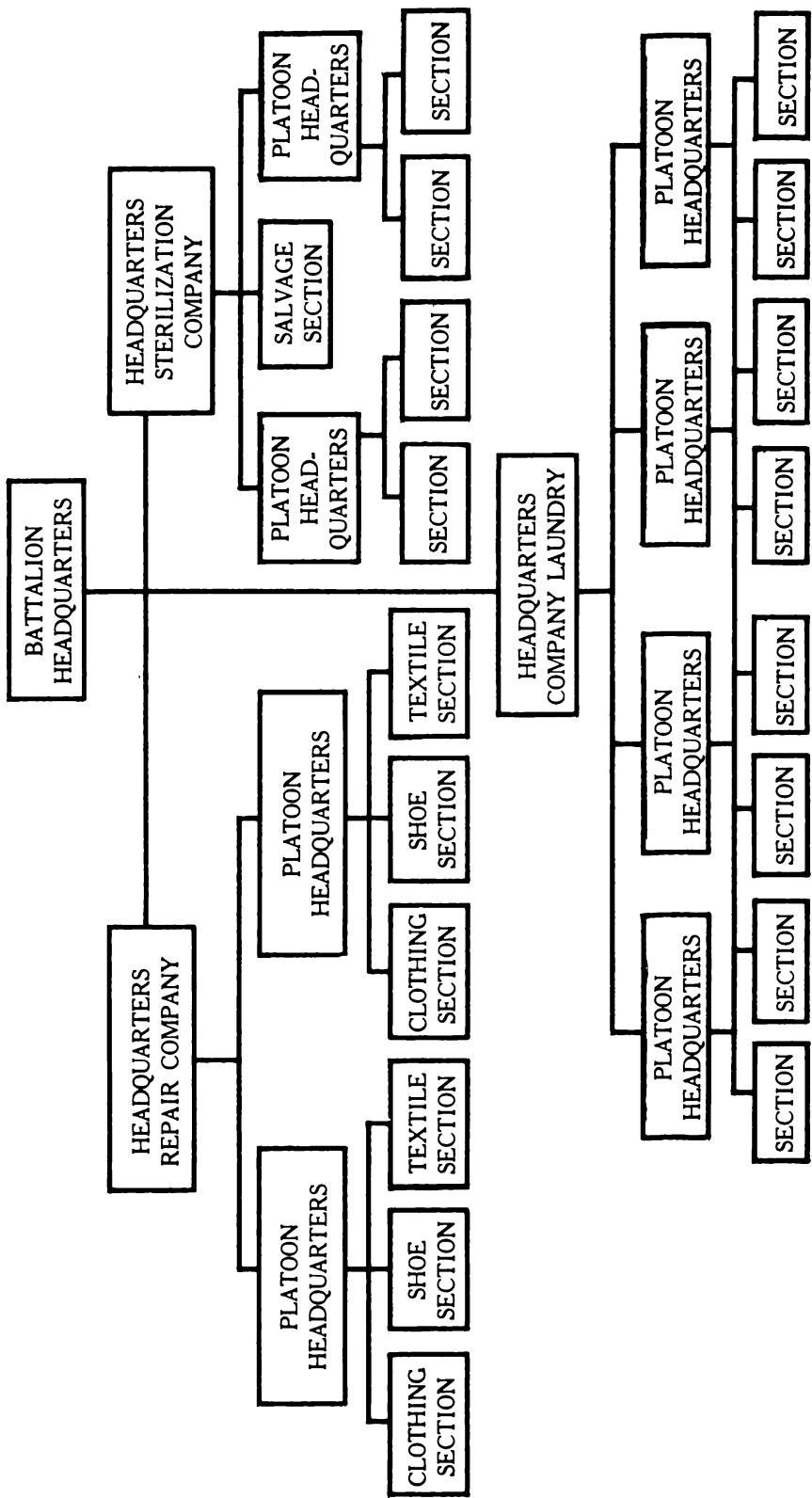


FIGURE 24

c. Supply. 1. The supplying of individual clothing and equipment to the personnel of the detached unit can most suitably be taken care of by the supply officer and other supply personnel of the new company to which the unit is attached.

2. Operating supplies (see appendix D for a three months' estimate), on the other hand, will normally be drawn by the platoon commander on requisition to the supply officer of the organization to which attached. Where the operating units are close enough together, all property and supply considerations will be controlled by company headquarters, and the operating units will draw operating supplies from that source. The company operating supplies in turn may be drawn directly from an advance depot or from the quartermaster of the higher echelon, such as corps, army, or GHQ, to which the laundry company (or perhaps battalion) may be assigned.

3. Present policy is to ship a twelve months' stock of repair parts for each sixteen semimobile laundry trailers to the overseas base depot serving the units concerned. Requests for parts will be on the depot either directly or through channels, whichever appears to be more expedient. In the United States, repair parts will not be stored by the depot, but will be procured from the manufacturer.

d. Mess. The detached platoon or similar unit will take with it its proportionate part of mess and cooking facilities. An equitable breakdown of this equipment is impossible, however, since prescribed allowances do not provide all articles in sufficient quantity. (See WD Cir. 25, 1942.) One cook, one cook's helper, and one unit of the field range, will accompany the detached platoon. Where necessary, the platoon may provide its own mess, but under usual circumstances the range and the cooks will be employed by the company to which the platoon is attached.

116. SECURITY AND CAMOUFLAGE. The company commander and the platoon commanders must make full use of their knowledge of methods of achieving security and camouflage. Each new situation will require a different practical application of these lessons. The subject of camouflage has been discussed to some degree in paragraph 35d.

117. DEMOLITION. Every organization commander should instruct all members of his command in the fundamentals of demolition technique in preparation for the day when any one of them may be called upon to carry out some phase of this important work.

APPENDIX A

CHECK LIST FOR TRAINING INSPECTION OF QUARTERMASTER LAUNDRY COMPANY SEMIMOBILE PRIOR TO OVERSEAS MOVEMENT

_____ (Unit) _____ (Date)

_____ (Date of Activation) _____ (Race)

_____ (Location) _____ (Assignment)

_____ (Unit Commander) _____ (Attached Personnel)

Authorized Strength _____
Officers _____ W.O. _____ Nurses _____ Enlisted _____
Officers _____ Enlisted Men _____

Actual Strength _____
Officers _____ W.O. _____ Nurses _____ Enlisted _____
Officers _____ Enlisted Men _____

Strength of Unit (By ACC Test): Class I _____ II _____ III _____ IV _____ V _____ Total _____

SECTION I (Determine by Observation)

1. Is unit supply section trained to function properly?
(Determine by proper Inspection Guide—I.G.D.)
2. Is unit mess section trained to function properly? Eliminate waste?
Handle ration?
(Determine by proper Inspection Guide—I.G.D.)
3. Is unit administrative section trained to function properly?
(Determine by proper Inspection Guide—I.G.D.)
4. Military courtesy and discipline
(Determine by proper Inspection Guide—I.G.D.)
5. Physical condition of troops
(Determine by observations of selected groups in hand to hand fighting, obstacle courses, etc.)
6. Have methods of training been in accordance with FM 21-5?
7. Are texts and training aids available in accordance with FM 21-6 and FM 21-7?
8. Are personnel qualified in their individual duties?
 - (a) Officers?
 - (b) Enlisted men
 - (c) Are visual aids, training films, film strips, and illustrated charts available and used in training?
9. How many trainees have completed SOS Four Week Basic Program?

10. Number of trainees now undergoing SOS Four Week Basic Program? _____
11. Date all trainees will complete SOS Four Week Basic Program? _____
12. (a) Has MTP 10-1 for unit been followed? _____
(b) MTP 10-3? _____
13. Has lost training time been made up? _____
Causes, excuses, etc. _____
14. How many men have completed prescribed course with principal arm? _____
Percentage qualified? Expert _____ Sharpshooter _____ Marksman _____
15. How many men have not completed prescribed course with principal arm? _____
Cause? Defects? Lack of arms, ammunition _____
16. Are specialists properly classified? _____
Trained? _____
Skilled? _____

SECTION II

Practical Test of Individuals

BASIC	Degree of Proficiency
1. Test for knowledge in use of First Aid (Determine by Inspection Guide—I.G.D.)	_____
2. Test for knowledge of map reading	_____
3. Test for conduct if captured	_____
4. Perform gas mask drill	_____
5. Are men oriented in the mission of the unit?	_____
6. Do they know their officers and noncommissioned officers by name?	_____
7. Is each individual representative of completion of good basic military training?	_____

TECHNICAL

Are specialists able to perform their primary mission? _____
(Determine by spot check of each of the following types of specialists. Set up specialist tasks for each.)

- (1) Technical sergeant, laundry foreman (102) _____
- (2) Staff sergeant, mechanic, assistant foreman (121) _____
- (3) Chauffeurs (345) _____
- (4) Clerks, record (055) _____
- (5) Enginemen, stationary, gasoline (081) _____
- (6) Tumblermen (103) _____
- (7) Markers (590) _____

SECTION III

Practical Test of Complete Unit

1. Set up problems involving conduct of the unit in the following operations:
 - (a) Selection of camp site and setting up of laundry for operation.
 1. Does the site afford the best facilities for properly servicing the troops?
 2. Is proper distribution made of units?
 3. Are roads and road conditions effectively considered?
 4. Are reserve units available for emergency relief?
 - (b) Defense of bivouac
 1. Is the plan of defense tactically sound?
 2. Are all personnel armed with permanently assigned weapons?
 3. Does the plan for issue of arms and ammunition efficiently meet the requirements of speed, safety and the proper safeguarding of weapons?
 4. Is the plan adequate for defense against:
 - a. Ground troops?
 - b. Paratroops?
 - c. Air attacks?
 - (c) Demolition of equipment
 1. Is the plan technically sound?
 2. Is the plan tactically sound?
 3. Are all key personnel acquainted with the plan and capable of performing it?
 - (d) Showdown inspection of organizational and individual personal equipment
 1. Is organizational equipment complete and serviceable?
 2. Is individual equipment complete and serviceable?
2. Based upon the above problems:
 - (a) Can unit perform its primary mission?
 - (b) Can unit serve set number of troops?
3. Set up a problem involving unit in offensive ground action as a combat rifle unit (covering tactical training of infantry soldier)
Can unit perform this mission in a (satisfactory), (very satisfactory), (excellent) manner?
4. Check operation and maintenance of its organizational equipment
 - (a) Are the vehicles properly operated?
 - (b) Is the equipment properly maintained?
 - (c) Is preventive maintenance practiced?
 - (d) Are technical instructions in care and operation with each vehicle?

SECTION IV

REMARKS

SECTION V

CONCLUSIONS

1.
 - (a) Are any phases of training incomplete?
If so, what—why? _____
 - (b) When will all phases of training be completed?
(Date) _____
 - (c) What equipment or other training aids are lacking to complete training?

2. (Answer *a* or *b*)
 - (a) Unit can now perform its primary mission in a (satisfactory), (very satisfactory), (excellent) manner.

 - (b) Unit will be ready to perform its primary mission on _____
(Date) _____

SECTION VI

RECOMMENDATIONS

Name _____

Rank

Office

APPENDIX B

QUARTERMASTER LAUNDRY COMPANY, SEMIMOBILE, INSPECTION

The following check list is recommended by Military Training Division, OQMG, for use by inspectors making official visits to quartermaster laundry companies, semimobile, throughout the service.

1. FACILITIES AND EQUIPMENT.

a. Building Facilities.

Vehicle	Cleanliness	Orderliness	Serviceability and Repairs
Washer and Extractor Trailers			
Tumbler Trailers			
Laundry Van Semitrailers			

b. Mobile Equipment.

1. Does the company have sufficient mobile equipment to carry on the teaching program?
2. How many laundry trailers does the company have?

c. Equipment and Supplies.

1. Is handling equipment sufficient for teaching purposes?
2. (a) What articles of equipment, in addition to those on hand, are considered necessary to meet the training requirements of a quartermaster laundry company, semimobile?

- (b) Does the present Tables of Basic Allowances meet these requirements?
3. Is full use being made of authorized allowances as prescribed in Tables of Basic Allowances?
4. Examine supplies, material, and equipment on hand
Do they meet requirements?

5. Does procuring agent understand the preparation of semiannual requisitions on OQMG? _____

d. Textbooks and Manuals.

1. Are the present manuals adequate to meet training needs? _____

(a) Are machinery manufacturers' manuals used? _____

(b) Are TM 10-510, and FS 10-43 used in teaching operation and maintenance of vehicles? _____

(c) Are there any technical manuals used for "washroom practice" instructions? _____

2. Does the use of these manuals produce coordinated courses of instruction?

If not, what action is recommended to prepare suitable material? _____

3. Are other manuals or texts needed? _____

Which ones are recommended? _____

4. Are correct washing formulas used in teaching? _____

e. Visual Aids.

1. If visual aids are used, state which:

Visual Aid	How Many	Make or Description
35 MM projector		
16 MM projector		
Film strip projector		
Stereopticon		
Other		

2. Which training films have been acquired for regular use or have been recommended for production to meet training needs? _____

2. PROGRAM.

a. Approved Programs.

1. Have suggested courses of instruction and study been prepared for use in all training programs?
2. Are schedules and programs being followed as printed?
3. Have programs and schedules been submitted to the OQMG for approval?
4. Are new courses begun or are any discontinued without knowledge and approval of OQMG?

b. Functional Program.

1. Is all practical work supplemented by training which makes clear the objective to be attained?
2. Does the scope of the program include adequate training so that all personnel may become familiar with all operative functions of the unit?
3. Are personnel trained so that they can maintain and make minor repairs on laundry machinery?
4. Is there a course in oiling, lubricating, and caring for tractors and trailers?
Do selected individuals attend this course?
5. Have the required number of drivers been trained to operate each trailer unit?
Are they taught to back around and handle these vehicles in restricted space?
6. Do the enlisted men understand the capacity of trailers?
Which part of their training emphasizes this?

7. Are pressing and dry-cleaning taught as functions of the company? _____
8. Does instruction include teaching of measures which will reduce loss and damage of articles?

9. Does instruction emphasize any difference between laundering of shirts and small articles and laundering of bulky articles such as sheets, mattress-covers, blankets, etc? _____

10. Are the following duties taught by means of practical operations? _____

- (a) Washing
- (b) Drying
- (c) Sorting
- (d) Marking
- (e) Return of Clothing

11. Does the instruction cover the proper use of "semimobile laundry detergent" as issued for use? (authorized and required for use instead of laundry soap) _____

12. Are the following subjects taught?

- (a) Steam Control
- (b) Heat Control

13. Are students taught the use of soda, soap, starches, bleaches, blues, and sours, so that these could be used if and when necessary? _____

14. Are personnel trained so that each unit can operate separately? _____

15. *Security*

- (a) Are camouflage and concealment taught in connection with operation of trailers?
- (b) Are students given practical exercises in map reading?
- (c) Is defense against chemical attack incorporated in basic training with reference to incendiary and vesicant agents, lung irritants, first aid, decontamination, gas-mask drill, and practice in evacuating a bivouac?
- (d) In teaching defense against air and mechanized attack, is special reference made to road blocks, concealment and terrain features?

16. Submit any additional information considered pertinent to the efficient training program of a quartermaster laundry company, semimobile _____

3. INSTRUCTOR PERSONNEL.

Instructors.

COMMISSIONED		ENLISTED	
Rank	Number	Grade	Number

Have instructors had sufficient civilian laundry experience as a background?

4. STUDENTS.

a. Previous Experience.

How many enlisted men in the company have had previous experience in laundry work?

b. Advanced Training.

1. How many enlisted students now assigned to training should be given advanced training?
2. Are there any enlisted students who are potential laundry-officer material?

c. Officer Students.

Are all officers being trained to meet requirements?

d. Combined Personnel.

Are all personnel being trained to meet functional requirements of the company?

5. ADMINISTRATION OF TRAINING.

Operation.

- a. Have administrative and operative procedures been compiled which will enable a newly assigned officer to function immediately and efficiently in the operation of a quartermaster laundry company, semimobile?
- b. Have all safety rules been complied with?
- c. Have officers in charge visited other companies to see like training in operation?
- d. Have job sheets for instruction purposes been exchanged with other companies for further coordination?

6. RECORDS AND FORMS.

Forms in Use.

- a. Which form is used for permanent record of students? (Secure sample)
- b. Are certificates and diplomas used? (Secure samples)
- c. Is there a definite training schedule used, showing weights by percentages, and instruction of the unit? (operation, maintenance, procedure, classification, etc.) (Get copy)

APPENDIX C

SPARE PARTS AND TOOLS

PART I

SPARE PARTS

- 1 set of valve discs for water inlet valves on washer
- 1 set of V-belts or chain and motor sprocket for washer, if this type of drive is used on first reduction
- 1 outlet valve gasket for washer
- 1 set of cylinder door latch springs for washer
- 1 set of rubbers for 20" extractor
- 1 set of belts for 20" extractor
- 2 sets of belts for 36 x 30 open end door tumblers
- 1 set of motor bearings for washer
- 1 set of motor bearings for extractor
- 2 sets of motor bearings for tumblers
- 6 water gauge glasses for boiler water column
- 6 sets of packing for water gauge glasses
- 2 sets of packing for water pump
- 1 set of bearings for water pump motor
- 2 sets of exhaust manifold gaskets for generator engine
- 2 sets intake manifold gaskets for generator engine
- 2 sets head gaskets for generator engine
- 2 sets of water hose for generator engine
- 6 spark plugs for generator engine
- 2 fan belts for generator engine
- 2 sets of pump packing for generator engine
- 6 complete sets of fuses
- 2 oil burner nozzles

1 set of oil burner electrodes
1 set of bearings for oil burner motor
1 gasoline blow torch
2 bars of Crane No. 50 solder with flux
1 nozzle strainer
4 ft. ignition cable
4 cable connectors
1 fuel pump
6 oil suction strainer screens
2 fusible plugs
8 handhole gaskets
1 flexible coupling for pump shaft if used
1 oil pressure gauge
1 ignition transformer
1 wire flue brush
2 tubes for boilers

APPENDIX C **SPARE PARTS AND TOOLS**

PART II **TOOLS**

1 driver, screw, 14" insulated handle
1 driver, screw, 4"
2 wrenches, pipe, 18", capacity 1½"
2 wrenches, pipe, 24", capacity 1½"
1 wrench, adjustable, 12"
6 wrenches, open end, ½" to 1"
1 hammer, machinist, ball-peen, weight 1½ lbs.
1 hammer, carpenter's, claw, 1 lb.
1 pliers, side cutting, 8"
1 pliers, combination, slip joint, 8"
1 set socket wrenches, ¼" to 1"
1 extractor spindle wrench
1 hose spanner for 3" couplings
1 hose spanner for 1½" couplings
1 push rod, adjusting wrench
1 spark plug wrench
1 saw, cross-cut, 24" cutting edge
1 hammer, sledge, weight 10 lbs.
1 set Allan set screw wrenches

- 1 mattock, pick, 5 lbs., with handle
- 1 level, wood, 12"
- 1 hack-saw frame, adjustable, 8" to 12", with 24 blades
- 1 ax, handled, chopping, single bit, 4 lbs.
- 1 shovel, general purpose, D-handle, round point
- 1 oiler, steel, straight spout, spring bottom, capacity $\frac{1}{2}$ pt., diameter 3"
- 1 file, 10" round, smooth
- 1 file, 10" half round, smooth
- 1 file, 10" flat, smooth
- 1 file, 12" square bastard
- 3 handles, No. 3, file
- 2 chisels, cold, $\frac{3}{4}$ "
- 1 chisel, cape, $\frac{1}{2}$ "
- 1 can, 5 gal., gasoline, with flexible spout

APPENDIX D

ESTIMATE OF THREE MONTHS' OPERATING SUPPLIES

The following is an estimate of operating supplies to be consumed in 3 months by 2 laundry trailers, operating 8 hours a day, 6 days a week in the field. These supplies, except gasoline and fuel oil, are carried into the field in a supply truck attached to the laundries.

Soap, synthetic.....	550 pounds
Fuel Oil, No. 2 or No. 3 grade.....	3600 gallons
Gasoline.....	2100 gallons
Lubricating Oil, S. A. E. No. 30.....	10 gallons
Cup Grease, medium.....	2 pounds
Hose Washers, rubber, $1\frac{1}{2}$ inch.....	12 each
Graphited Pump Packing, $\frac{1}{8}$ inch.....	1 pound
Soda Ash.....	10 pounds

APPENDIX E

RESIZING

PART I—MEASUREMENTS OF CLOTHING

Garment	Size	Measurements in Inches					Remarks
		Full Breast Measure	Length	Inside Sleeve Seam	Outside Sleeve Seam	Belt	
Caps . . . . .	...	...	...	...	...	...	Basis: Inside measurement divided by 3 1/4
Drawers . . . . .	...	...	...	...	...	...	Basis: Actual waist measurement in inches
Jackets, field	34	41	25 3/4	17	17 1/4	...	This garment is cut 7 inches over given size
	36	43	26 1/8	17 1/2	17 3/4	...	
	38	45	26 1/2	17 1/2	17 3/4	...	
	40	47	26 7/8	17 3/4	17 3/4	...	
	42	49	27 1/4	17 3/4	17 3/4	...	
	44	51	27 1/4	17 3/4	17 3/4	...	
	46	53	27 1/4	17 3/4	17 3/4	...	
	48	55	27 1/4	17 3/4	17 3/4	...	
	50	57	27 1/4	17 3/4	17 3/4	...	
Jackets, herringbone twill . . .	34	40	27 1/4	...	33	...	This garment is cut 6 inches over given size
	36	42	27 5/8	...	33 1/2	...	
	38	44	28	...	34	...	
	40	46	28 3/8	...	34 1/4	...	
	42	48	25 5/8	...	34 1/4	...	
	44	50	28 7/8	...	34 3/4	...	
	46	52	28 7/8	...	35	...	
Shirts	34	29 1/4	...	32 & 33	...	12	Basis: Determine collar size and sleeve length
	S	36	29 3/4	...	32 & 33	...	12 1/2
	E	38	30 1/8	...	32 & 33	...	13
	E	40	31	...	32 & 33	...	13 1/2
	E	42	31 1/2	...	32 to 34	...	14

Garment	Size	Measurements in Inches						Remarks
		Full Breast Measure	Length	Inside Sleeve Seam	Outside Sleeve Seam	Belt	Collar	
	C	44	32	....	32 to 34	....	14 $\frac{1}{2}$	
O	46	32 $\frac{1}{2}$	....	32 to 35	....	....	5	
L	47	33	....	32 to 35	....	....	15 $\frac{1}{2}$	
L	48	33 $\frac{1}{2}$	....	32 to 35	....	....	16	
A	50	34	....	33 to 35	....	....	17	
R	52	34 $\frac{1}{2}$	....	34 & 35	....	....	18	
	54	35	....	34 & 35	....	....	19	
	55	35	....	34 & 35	....	....	20	
Socks	.....	.....	.....	.....	.....	.....	.....	<i>Basis: Length end of toe to back of heel in inches</i>
Trousers	.....	.....	.....	.....	.....	.....	.....	<i>Basis: Actual waist and leg in seam measurements in inches</i>
Undershirts	.....	.....	.....	.....	.....	.....	.....	<i>Basis: Waist measurement in inches</i>
Working suits, one-piece	Size	Breast	Sleeve	Seat	Trunk	Leg (Inseam)	Sleeve measurement is on inside seam	
	36	44	21 $\frac{1}{2}$	46 $\frac{1}{2}$	68	30		
	38	46	22 $\frac{1}{4}$	48 $\frac{1}{2}$	69 $\frac{1}{2}$	30		
	40	48	23	50 $\frac{1}{2}$	71	30 $\frac{1}{2}$		
	42	50	23 $\frac{1}{2}$	52 $\frac{1}{2}$	72 $\frac{1}{2}$	30 $\frac{1}{2}$		
	44	52	24	54 $\frac{1}{2}$	73 $\frac{1}{2}$	31		
	46	54	24 $\frac{1}{2}$	56 $\frac{1}{2}$	74 $\frac{1}{2}$	33		
Leggings	Size	Length	Calf	Ankle				
	R-1	12 $\frac{3}{4}$	13 $\frac{1}{2}$	9 $\frac{1}{2}$				
	R-2	12 $\frac{3}{4}$	15	10				
	R-3	12 $\frac{3}{4}$	16 $\frac{1}{2}$	11				
	L-1	14	13 $\frac{1}{2}$	9 $\frac{1}{2}$				
	L-2	14	15	10				
	L-3	14	16 $\frac{1}{2}$	11				

*Basis indicates the measurement from which the size must be determined regardless of distortion of garment.

APPENDIX E

RESIZING

PART II

SIZE DETERMINANTS AND METHODS OF MEASURING GARMENTS

Following are the prescribed methods of taking measurements for some of the more common items of issue clothing. They may be used as a guide in determining methods of measuring other garments of similar construction.

1. BREAST MEASUREMENT. a. Coats and field jackets.

jackets. The breast is measured from the center seam of the back of the garment, along the breast line to the side seam (close under the armhole) to the eyelet of the top buttonhole, or to the top of the zipper, as the case may be. The measuring is done from the back seam to the operator's left as he looks at the back of the garment, and is done with the side plait closed, preferably pinned down. The measurement is one-half of the full breast measure; that is, a reading of $20\frac{1}{2}$ inches on a coat would indicate a full breast measure of 41 inches and the coat would be size 38.

b. Herringbone twill jackets. Measure across the front of the garment at the breast line. The reading, *plus* two inches, equals one-half of the full breast measure. The garment must be buttoned when the measurement is made.

c. Overcoats, wool, roll collar. The breast can be measured from the center seam of the back along the breast line to the side seam, then close under the armhole at the breast line to a point *halfway* between the button and the eyelet of the first buttonhole. (This is because the overcoat is a double-breasted garment.) Another method is to take the measurement to the front edge of the coat instead of a point halfway between the button and eyelet. This measurement is one-half of the full breast measure *plus* $4\frac{1}{4}$ inches.

d. Shirts, raincoats, and one-piece working suits.

The garment is buttoned, and one-half of the breast measurement is obtained by determining the distance from left to right across the front of the garment along the breast line.

2. LENGTH OF GARMENT. The length of coats, field jackets, herringbone twill jackets, overcoats, coat-style shirts, and raincoats is measured along the center of the back from the bottom edge of the under-collar to the bottom of the garment.

3. SLEEVE LENGTH. **a. Coats, field jackets, overcoats, raincoats, and one-piece working suits.** Place tape measure under the arm at inseam of sleeve and measure straight to bottom of sleeve.

b. Coat-style shirts and herringbone twill jackets. Measure from center of back at bottom of under-collar seam straight to bottom of sleeve. When making this measure for *shirts*, a plait of one inch must be taken in the sleeve at the shoulder.

4. BELT MEASUREMENT. For overcoats, the belt is buttoned and measured straight across the back from side seam to side seam.

5. WIDTH OF BACK. For raincoats, measure from left to right at armhole seams.

6. COLLAR. **a. Raincoats.** Lay coat flat on table, unbuttoned and measure from corner to corner at the bottom edge of the collar.

b. Shirts. Lay shirt on table with collar unbuttoned and measure from buttonhole on one side to center of button on other side.

7. LEG LENGTH (INSEAM). For trousers and one-piece working suits, place the tape at the crotch point and measure along the seam to the bottom of the trousers.

8. SEATS. **a. Trousers.** Measure from side to side along a line one inch above the bottom of the fly. This measurement gives one-half of the seat size. Seats of khaki trousers are 10 inches larger than waist size up to size 38; above size 38 waist, the seat is 9 inches over waist size. The seat measurement of elastique trousers is about 10 inches over all waist sizes.

b. One-piece working suits. Measure from side to side on a line from the lower end of one side pocket to the lower end of the other. This measurement gives one-half of the seat size.

9. TRUNK. For one-piece working suits, lay suit on table and measure from crotch to shoulder seam at collar. This gives one-half of the trunk measure.

10. WAIST. Trousers are laid flat on the table, front up, with the top button fastened. Measure from one side to the other along a line through the middle of the waistband. This gives one-half of the waist measurement.

11. TROUSER BOTTOMS. For khaki trousers, the bottoms are $20\frac{1}{2}$ inches up to size 38 waist; larger waist sizes have 21 inch bottoms. Elastique trousers have $19\frac{1}{2}$ inch bottoms up to size 32 waist; larger waist sizes have 20 inch bottoms.

APPENDIX F ADMINISTRATION

PART I — MILITARY RECORDS

a. Company Records

Company Correspondence File	
Company Council Book	WD QMC 15
Company Fund	WD QMC 15
Company Morning Reports	WD AGO 1
Company Orders	
Company Property Book	QMC 424 (rev)
Company Punishment Record	
Daily Sick Report	WD AGO 5
Duty Roster	WD AGO 6
Enlisted Man's Pass	WD AGO 7
Exchange Order (optional form)	ExO-1
Individual Clothing and Equipment Record	WD AGO 32
Individual Clothing Slip	WD AGO 35
Individual Equipment Record	WD AGO 33
Report of Survey*	WD AGO 15
Requisitions	WD QMC 400, 409, 411, 412, 413, 414
Statement of Charges*	WD AGO 36

*These forms are initiated by the company commander as the "responsible officer," but preparation is usually done by the personnel section.

b. Personnel Records—These are also required to be kept by the company when it is “separated” or “detached.”

Abstract of Class “A” Pay Reservation Deductions (and ledger cards).....	WD FD 54
Application for Family Allowances.....	WD AGO 625
Class F Deduction (When prepared by individual soldier. See Part II, c)	
Application for Pay Reservation for Purchase of War Savings Bonds Class “A” Pay Reservation.....	WD AGO 29-5
Certificate of Service.....	WD AGO 280
Class D, E, and N Allotments authorization and discontinuance.....	WD AGO 29
	WD AGO 30
Consolidated Report of Classification in Arms.....	WD AGO 111
Correspondence and Files	
Descriptive List of Deserter From Army of the United States.....	WD AGO 45
Discharges.....	WD AGO 55, 56, 57
Emergency Addressee and Personal Property Card.....	WD AGO 43
Extract from Service Record.....	WD AGO 25
Final Statement.....	WD 370
Furlough.....	WD AGO 31
Notification of Discharge.....	WD AGO 39
Pay Rolls.....	WD 366 and 366a
Qualification Cards.....	WD AGO 20
Report of Apprehension or Surrender of a Deserter.....	WD AGO 46
Report of Death.....	WD AGO 52
Report of Desertion.....	WD AGO 44
(See Part II c)	
Report of Individual Classification in Arms.....	WD AGO 110
Report of Physical Examination of Enlisted Man Prior to Discharge or Retirement.....	WD AGO 38
Reports of Change and Rosters.....	WD AGO 303 and WD AGO 309
Request for Cancellation of or Change in Pay Reservation for Purchase of War Savings Bonds.....	WD AGO 30-5
Service Records (including inserts).....	WD AGO 24
Special Orders	
Statement of Account.....	WD AGO 27
Voucher for Pay and Allowances of Individual Enlisted Man.....	W ¹ 337

APPENDIX F

ADMINISTRATION

PART II

COMPANY COMMANDER'S CHECK LIST

- a. When activating a separate or detached company without assistance from personnel section.**
 - 1. Prepare Initial Roster.....AR 345-900, Par. 12
 - 2. Submit Initial Report of Change.....AR 345-800, Par. 18
 - 3. Initiate Morning Report.....AR 345-400
(Prepared by 1st sergeant. Company commander authenticates. Send to higher headquarters daily.)
 - 4. Check Table of Organization.....AR 615-26
Requisition personnel.
 - 5. Initiate Company Property Book.....WD Cir. 405, 1942
 - 6. Check Qualification Cards and Service Records.
Assignments in accordance with qualifications.....AR 615-26
 - 7. Company orders.....AR 310-50
 - (a) Appointment and reduction of privates first class.....AR 615-5
 - (b) Appointment and reduction of noncommissioned officers and technicians.....AR 615-10
 - 8. Initiate Daily Sick Report.....AR 345-415
(Prepared by 1st sergeant. Company Commander authenticates. Send to unit surgeon with sick detachment. 1 copy.)
 - 9. Initiate Duty Roster.....AR 345-25
(Prepared by 1st sergeant. Company Commander supervises. 1 copy, retained by company.)
 - 10. Company Fund
 - (a) Council Book.....,.....AR 210-50
(Prepared and kept by company commander, 1 copy, file voucher for each item, audited by company council each month.)
 - (b) Property list.....AR 210-50
 - (c) Bank account
 - 11. Company History.....AR 345-105

12. Check Combination Equipment Chart and Requisition. OQMG Cir. Letter (Chart covers all items and quantity thereof of individual and organizational equipment to be initially issued unit by all supply arms and services, except individual clothing and equipment issued soldier at reception center. Company commander will receive copy of chart and will check with it against items issued to secure fulfillment of issue provided thereon.) 416, 11-20-42

13. Check Tables of Basic Allowances. (Equipment Table—when published, against Chart and Requisition referred to in (12) above and also Equipment Chart.)

14. Check Table of Allowances No. 20 for issue of post property.

15. Provide files for individual clothing and equipment records and requisition deficiencies.

b. When taking over a company already formed.

1. Inventory of property and equipment.
 - (a) Property Book.
 - (b) WD AGO 32 and 33.
 - (c) Check with custodial officer on T/A property.
2. Transfer Unit Fund.
 - (a) Check Council Book.
 - (b) Check company property list.
 - (c) Transfer bank account.
3. Check roster of company against T/O.
4. Check Morning Report against roster.
5. Check Duty Roster.
6. Check Service Records and Qualification Cards. (Commanding officers should know the qualifications and backgrounds of their men.)

c. After company is in existence, assuming assignment to personnel section.

1. DAILY

(a) Morning Report, WD AGO 1.....AR 345-400

- (b) Report of Change, WD AGO 303.....AR 345-800 chg. 1, 2
(Prepared by personnel officer, 3 copies. Original to machine records section. For individual officers, duplicate to Quartermaster General. For individual enlisted men, duplicate is not transmitted. For unit, duplicate to Quartermaster General, except not forwarded when outside continental United States. Triplicate: for individual enlisted men and officers, is retained in personnel section, for units to "Adjutant General, Returns Section, Miscellaneous Branch, Washington, D. C.")
- (c) Sick Report, WD AGO 5.....AR 345-415, chg. 1
- (d) Duty Roster, WD AGO 6.....AR 345-25
Publish duty details.
- (e) Company correspondence.....AR 340-15
Files.....AR 345-620
- (f) Company orders.....AR 615-5
Appointment to and reduction from Pfc.AR 615-5

Where company is "separate" or "detached" and is not assigned to a personnel section for administration, the company commander will assume the responsibilities detailed to the personnel officer herein.

2. MONTHLY

- (a) Pay accounts.....AR 345-155,
chg. 1, 2, 3, 4, 5
 - 1. Pay Rolls.....AR 35-4520
(Prepared and authenticated by personnel officer in quadruplicate. Original and duplicate to the disbursing officer, triplicate for company records, quadruplicate sent to TAG in lieu of roster. It will be completed to show men who have ceased to belong to organization or who have been assigned between time of preparation of pay roll and last day of month.)
 - 2. Voucher for Pay and Allowances of Individual Enlisted Men (WD 337.)
- (b) Check and return roster from Machine Records Unit.
- (c) Company council meeting.....AR 210-50
Audit Council Book.
- (d) Ration Account of Morning Report.....Par. 13a (6),
AR 30-2210
AR 35-4520
AR 345-400

(Prepared by the company commander to draw commutation of rations for men authorized to mess separately.)

Pars. 35 & 40,
AR 345-400

- (e) Initiate new forms.
 - 1. Morning Report..... AR 345-400
 - 2. Duty Roster..... AR 345-25
 - 3. Council Book..... AR 210-50

3. QUARTERLY

- (a) T/BA requisitions } or as directed by higher authority AR 35-6540
- (b) Clothing requisitions } AR 35-6540
- (c) Requisitions for expendables (or as needed)..... OQMC Cir. 1-18, 1942

4. SEMIANNUALLY

- (a) Read Articles of War..... AW 110
- Enter in Service Record..... AR 345-125
- (b) Check Service Records..... AR 345-125
- (c) Physical inventory of property.
- (d) Sex Morality Course..... AR 40-235

5. ANNUALLY

- (a) Check supply and property records.
 - 1. Company Property Book..... WD Cir. 405-1942
 - 2. New M/R for post property where custodial system not used.
- (b) Company orders.
- (c) New correspondence file..... AR 345-620

6. MISCELLANEOUS (throughout year)

- (a) Allotments..... AR 35-5520
- 1. Class E..... Chg. 1, 2,
 (Purposes: (1) support of allotter's family or dependent relatives, (2) to banks in the United States, (3) to commercial life insurance companies for payment of premiums. Authorizations made in duplicate on WD AGO Form 29. Duplicate is filed with service record. Send original, and all correspondence pertaining thereto, to: "Office of Dependency Benefits, 213 Washington St., Newark, N. J." see WD Cir. 382-42)

382-42. Make notations on service record, pay roll and soldier's individual pay record. For discontinuance use WD AGO 30. Class E Allotments will be accepted from military personnel wherever situated, see WD Cir. 382-42.)

2. Class D AR 600-100, chg. 1
(Covers allotments for premiums for United States government life insurance. Forms and procedure are same as with Class E Allotments. All forms and correspondence pertaining thereto will be forwarded to "Examination Division, Bldg. X, 19th and B Sts., N. E., Washington, D. C.) AR 35-5520, chg. 1, 2, WD Cir. 382-42

3. Class N AR 35-5520, chg. 1, 2, WD Cir. 382, 387-42
(Allotments for premiums for National Service Life Insurance. Forms, procedure, and corresponding address same as with Class D Allotments, except applicant should mail duplicate to his beneficiary.)

(b) Company Punishment Record AW 104
(No entry made on service record, but company commander will keep record showing date, offense, party, and punishment. In case of transfer, record is filed but no transcript is forwarded to new commanding officer.) AR 345-125, par. 28 of chg. 3

(c) Class F Deduction Bull. 29, WD 1942
(WD AGO Form 625, Application for Family Allowances, is executed in triplicate. Have eligible enlisted man, grades 4 to 7 inclusive, sign before notary. "Original" is indorsed by personnel officer or organization commander and mailed to: "Allowance and Allotment Branch, War Department, Bldg. Y, 20th and B Sts., N. E., Washington, D. C." "Official copy" is filed with soldier's service record, third copy is applicant's. On receipt of WD AGO 650, Notification of Action Taken on Application for Family Allowances, where same is approved, entry of proper pay roll notations and Soldier's Individual Pay Record and Card will be verified.) WD Cir. 225-42
WD Cir. 288-42

(d) Discharge

1. Certificate of Service AR 345-500
(Form is WD, AGO 280. Personnel officer prepares in duplicate. The recipient and the commanding officer sign both copies.) WD Cir. 252-41

2. Discharge Certificate.....AR 345-470, chg. 2
(Personnel officer prepares and sends to company commander for character entry and signature.)

3. Final Statement.....AR 345-475
(Prepared in duplicate. Original only signed. Personnel officer certifies. Enlisted man presents original to proper disbursing officer for payment.) AR 35-2480

4. Report of Physical Examination of Enlisted Man Prior to Discharge or Retirement.....AR 40-100
(Enlisted man will declare his physical condition thereon, and then be examined by Medical Officer within 72 hours prior to discharge. Not used where discharged for physical disability or because of sentence of civil court.)

(e) Emergency Addressee and Personal Property Card.....WD Cir. 338-42
(WD, AGO 43 is prepared in and retained by personnel section. Cards will be prepared for personnel now overseas and sent to The Adjutant General. Send with Service Record in case of transfer. If ordered outside continental U. S. send to The Adjutant General.)

(f) Furloughs, Passes and Delays.....AR 615-275
(Furloughs to be 15 days or less except in emergency or return from overseas, may not exceed 15% of command at a time except as provided. 15% rule waived in case of men completing basic training.) WD Cirs. 133-41, 56-42, 79-42

(g) Report of Survey.....AR 35-6640, chg. 1, 3
(Prepared by responsible officer and forwarded to commanding officer in triplicate. Supporting evidence attached only to original copy. Is for property lost, destroyed or damaged *other* than by fair wear and tear in government service.)

(h) Qualification in Arms.....AR 345-1000
(Report is made on WD AGO 110 by unit personnel officer from data contained in original score cards or reports of boards of examination. Report is then referred to officer who supervised the record practice. He verifies report from original score cards, signs certificate thereon, and returns it to unit headquarters. Personnel officer prepares classification order which the

Adjutant signs and publishes. Organization commander destroys scores cards upon receipt of classification order. Qualification of each man is entered by personnel officer under "Remarks" on WD AGO 20. Entry of qualification is made in the service record *only* in cases where extra compensation is granted, see chg. 1. Unit commander requisitions and issues qualification badges and bars. The Consolidated Report of Classification In Arms (WD AGO 111) is prepared by personnel officer.)

(i) Pay Reservation—Class A WD Cirs. 215
(Purchase of War Savings Bonds. Personnel officer prepares WD AGO 29-5 in quadruplicate. Original and duplicate to Chief of Finance, triplicate in personnel section, quadruplicate to subscriber. To change or cancel, use WD AGO 30-5.) 314, 364, 368
of 1942

(j) Report of Desertion AR 615-300,
(Report of Desertion and extract copies of Morning Reports prepared in duplicate, company commander authenticates. Personnel officer sends the 2 copies to Adjutant General within 2 days after man dropped as deserter. Within 5 days personnel officer sends original Report of Desertion, Service Record, extract of Morning Report, Individual Clothing Record, list of clothing left by deserter, Qualification Card, supplemental deserter's Pay Roll in duplicate, and evidence to post commander who will hold papers one year, at end of which time will transmit the supplemental pay roll to disbursing officer for settlement. The original of Statement of Accounts is attached to Service Record and all records are forwarded to TAG. chg. 2, 5, 6
AR 615-360

(k) Report of Death AR 600-550
(In garrison and in the absence of a medical officer WD AGO Form No. 52 ordinarily will be prepared in triplicate and disposed of as indicated in regulation. WD AGO Form No. 54 (Inventory of Effects) will also be prepared. (See regulation as changed.)

(l) Soldier's Deposit Book AR 35-2600
(FD Form 10, prepared by personnel officer, who makes entry in service record and transmits copy to Chief of Finance.) AR 345-75

(m) Soldier's Handbook FM 21-100.
(Check to see issue to each enlisted man. Enter "FM 21-100 issued" with date in Remarks Administrative in service record.)

- (n) Soldier's Individual Pay Record Par. 11½, chg. 2
 (Prepared by personnel officer and issued to enlisted man at time service record is initiated. Entries authenticated by personnel officer. Pay roll is prepared for casual payment to enlisted man when individual pay record is presented to any personnel officer for one who has been separated from his organization and service record. When casual payment made, personnel officer will notify enlisted man's organization commander on WD AGO 19, Notice of Casual Payment, so proper entry may be made in service record.)
- (o) Soldier's Qualification Card AR 615-25, chg. 1, 2
 (Will accompany the service record of men upon transfer. Personnel officer is custodian, and supervises organizational assignment of personnel. It is his responsibility to record all newly developed skills, and keep the card up to date. It is responsibility of company commander to study qualification cards of his men so he may know their skills and abilities in making assignments and promotions. When enlisted man fires record course and fails to qualify, enter under "Remarks," showing weapon, course, and date firing completed. See WD Cir. 383-42.)
- (p) Statement of Charges WD AGO 36 AR 345-300
 (Prepared by personnel officer in triplicate. One copy retained by personnel section, one to company, and one to appropriate supply officer.)

APPENDIX F ***ADMINISTRATION***

PART III **PERSONNEL ADJUTANT'S CHECK LIST**

a. DAILY

- 1. Morning Report AR 345-400
 Transcribe pertinent information to proper records, and consolidate.
 - (a) Service Record AR 345-125
 - (b) Pay Cards and Soldier's Individual Pay Record AR 345-155
 Par. 11½

- (c) Report of Change.....AR 345-800
- (d) Qualification Cards.....AR 615-25
- 2. Correspondence.....AR 340-15
 - (a) Reports (required by higher headquarters)
 - (b) Letters
 - (c) Files.....AR 345-620
- 3. Preparation of headquarters' special orders.
- 4. Officers' and/or first sergeants' call.

b. WEEKLY

- Check Sick Books for sicknesses affecting pay and time.....AR 35-1440
- 1. Enter in Service Record.....AW 107
- 2. Enter on Pay Cards.

c. MONTHLY

- 1. Check, correct, and return Monthly Roster to Machine Records Unit.....AR 345-900
- 2. Prepare pay rolls.....AR 345-155

d. SEMIANNUALLY

- Check all Service Records.....AR 345-12

e. ANNUALLY

- 1. Start new correspondence file.....AR 345-620
- 2. Start new special order file.

f. MISCELLANEOUS

- 1. Allotments and Deductions.....AR 35-5520
- 2. Classification in Arms.....AR 345-1000, chg. 1
- 3. Consolidated Report of Classification in Arms.....AR 345-1000, chg. 1
- 4. Discharge.....AR 615-360
- 5. Emergency Addressee and Personal Property Card.....WD Cir. 338-42
- 6. Furloughs.....AR 615-275
- 7. Initial, Special, and Final Rosters.....AR 345-900
- 8. Insurance.....AR 35-5520
- 9. Qualification Cards.....AR 615-25
- 10. Report of Death (and allied papers).....AR 600-550
- 11. Report of Desertion (and allied papers).....AR 615-300, chg. 2, 5, 6
AR 615-360

APPENDIX G

QUARTERMASTER EQUIPMENT CHART

	Alws.	Note Ref.
INDIVIDUAL CLOTHING		
Belt, Web, Waist (M-1937).....	Ea. 295	
Cap, Garrison, Khaki, E. M.	Ea. 590	*7
Cap, Garrison, OD.....	Ea. 295	*7
Cap, Herringbone, Twill.....	Ea. 112	
Cap, Leather, Motorcyclist.....	Ea. 1	*8
Cap, Winter.....	Ea. 300	*7
Coat, Wool, Serge.....	Ea. 295	*7
Drawers, Cotton, Protective.....	Ea. 600	*5
Drawers, Cotton, Shorts or Drawers, Wool.....	Ea. 1475	*12
Gloves, Cotton, Protective.....	Pr. 600	*5
Gloves, Horsehide, Riding, Lined.....	Pr. 6	*7
Gloves, Horsehide, Riding, Unlined.....	Pr. 6	
Gloves, Leather, Heavy.....	Pr. 295	*1
Gloves, Wool, OD.....	Pr. 295	*7
Handkerchief, Cotton, White.....	Ea. 1180	
Hat, Herringbone, Twill.....	Ea. 239	
Helmet, Steel (M-1).....	Ea. 300	
Hood, Wool, OD, Protective.....	Ea. 300	*5
Insignia, Collar, E. M.....	Ea. 295	
Insignia, Collar, E. M., U. S.....	Ea. 295	
Insignia, Shoulder-Sleeve.....	Ea. 590	
Insignia, Slv., Chv., Serv., Ctn., Mstr. Sgt.....	Pr. 5	
Insignia, Slv., Chv., Serv., Ctn., 1st Sgt.....	Pr. 5	
Insignia, Slv., Chv., Serv., Ctn., Tec., Sgt.....	Pr. 25	
Insignia, Slv., Chv., Serv., Ctn., Stf. Sgt.....	Pr. 75	
Insignia, Slv., Chv., Serv., Ctn., Sgt.....	Pr. 20	
Insignia, Slv., Chv., Serv., Ctn., Corp.....	Pr. 45	
Insignia, Slv., Chv., Serv., Ctn., Pfc.....	Pr. 370	
Insignia, Slv., Chv., Serv., Wl., Mstr. Sgt.....	Pr. 4	
Insignia, Slv., Chv., Serv., Wl., 1st Sgt.....	Pr. 4	
Insignia, Slv., Chv., Serv., Wl., Tec. Sgt.....	Pr. 20	
Insignia, Slv., Chv., Serv., Wl., Stf. Sgt.....	Pr. 60	
Insignia, Slv., Chv., Serv., Wl., Sgt.....	Pr. 16	
Insignia, Slv., Chv., Serv., Wl., Corp.....	Pr. 36	
Insignia, Slv., Chv., Serv., Wl., Pfc.....	Pr. 296	
Jacket, Field, OD.....	Ea. 295	*7
Jacket, Herringbone, Twill.....	Ea. 457	
Laces, Legging, Extra.....	Pr. 30	
Laces, Shoe, Service, 40 In., Extra.....	Pr. 59	
Leggings, Canvas, Dismounted (M-1938).....	Pr. 295	
Muffler, Wool, OD.....	Ea. 295	*9
Necktie, Cotton, Mohair, OD.....	Ea. 590	
Overcoat, Wool, Melton, OD., Roll-Collar.....	Ea. 239	*7

		Alw.	Note Ref.
Overshoes, Arctic.....	Pr.	300	*3 *11
Raincoat.....	Ea.	295	
Shirt, Cotton, Khaki.....	Ea.	611	*7
Shirt, Flannel, OD.....	Ea.	590	
Shoes, Service.....	Pr.	590	
Suit, 1 Pc., Herringbone Twill	Ea.	112	
Trousers, Cotton, Khaki, E. M.....	Ea.	611	*7
Trousers, Herringbone Twill	Ea.	457	
Trousers, Wool, OD.....	Ea.	590	*7
Undershirt, Cotton, Protective.....	Ea.	600	*5
Undershirt, Smr., Slvls. or Undshirt, Wool.....	Ea.	1475	*12
Insignia, Slv., Ch., Ser., Ctn., Tech., Gr. 4.....	Pr.	75	
Insignia, Slv., Ch., Ser., Ctn., Tech., Gr. 5.....	Pr.	360	
Insignia, Slv., Ch., Ser., Wl., OD., Tech., Gr. 4.....	Pr.	60	
Insignia, Slv., Ch., Ser., Wl., OD., Tech., Gr. 5.....	Pr.	288	
Cap, Wool, Knit (M-1941).....	Ea.	300	*7
Hood, Cloth.....	Ea.	295	*9
Toque, Wool, Knit (M-1941).....	Ea.	295	*9 *10
Socks, Cotton.....	Pr.	885	
Socks, Wool, Heavy or Light.....	Pr.	885	
Coat, Mackinaw, OD.....	Ea.	56	*7

INDIVIDUAL EQUIPMENT

Bag, Barracks.....	Ea.	590	
Bag, Canvas, Field, OD (M-1936).....	Ea.	5	
Blanket, Wool, OD (M-1934).....	Ea.	1200	*6
Can, Meat (M-1932).....	Ea.	300	
Canteen (M-1910).....	Ea.	300	
Carrier, Pack (M-1928).....	Ea.	295	
Comforter, Cotton Filled.....	Ea.	300	*2
Cover, Canteen, Dismounted (M-1910).....	Ea.	300	
Cup (M-1910).....	Ea.	300	
Fork (M-1926).....	Ea.	300	
Haversack (M-1928).....	Ea.	295	
Knife (M-1926).....	Ea.	300	
Pin, Tent, Shelter, Wood.....	Ea.	1525	
Pole, Tent, Shelter.....	Ea.	305	
Pouch, First Aid Packet (M-1924).....	Ea.	300	
Roll Bedding, Waterproofed (M-1935).....	Ea.	5	
Spoon (M-1926).....	Ea.	300	
Suspenders, Belt (M-1936).....	Ea.	5	
Tag, Identification (M-40).....	Ea.	600	
Tape, Cotton, for Identification.....	Ea.	300	
Tent, Shelter, Half.....	Ea.	305	
Toilet Articles.....	Set	295	
Towel, Bath.....	Ea.	295	
Towel, Huck.....	Ea.	610	
Belt, Carbine.....	Ea.	300	
Pocket Magazine for Carb. Cal. .30 (M-1).....	Ea.	600	

ORGANIZATIONAL CLOTHING

	Alws.	Note Ref.
Outfit, Prot. Cloth, Imperm., Type II.....	Ea. 15	*13
Mittens, Insert Trigger Finger	Ea. 590	*9
Mitten, Shells, Trigger Finger.....	Ea. 295	*9

ORGANIZATIONAL EQUIPMENT

Bag, Canvas, Water Sterilizing	Ea. 3	
Bar, Mosquito.....	Ea. 300	*2
Bucket, Galvanized, 14 Qt.....	Ea. 2	
Can, Galvanized, with Cover, 10 Gal.....	Ea. 1	
Can, Galvanized, with Cover, 16 Gal.....	Ea. 1	
Can, Galvanized, with Cover, 24 Gal.....	Ea. 1	
Can, Galvanized, with Cover, 32 Gal.....	Ea. 1	
Container, Water, 5 Gal.....	Ea. 40	
Case, Canvas, Dispatch.....	Ea. 1	
Chest, Fiber, Record, Company.....	Ea. 1	
Desk, Fiber, Field, Empty, Company.....	Ea. 1	
Flag, Guidons, Bunting.....	Ea. 1	
Fly, Tent, Wall, Large, with Pns. and Pls.....	Ea. 1	
Goggles (M-1938).....	Ea. 1	
Headnet, Mosquito.....	Ea. 300	*2
Lantern, Electric.....	Ea. 1	
Lantern, Gasoline.....	Ea. 14	
Marking Outfits, Stamping, Metal.....	Ea. 1	
Range, Field (M-1937), 4 Unit.....	Ea. 1	
Screen, Latrine, C-W., Pns. and Pls.....	Ea. 1	
Stove, Tent (M-1941).....	Ea. 16	
Stretcher, Shoe.....	Ea. 1	
Tent, Storage, with Fly Pns. and Pls.....	Ea. 16	
Tool Kit, C-W, Tools, Carpenters'.....	Ea. 1	
Tool Set, C-W-T., Electrician.....	Ea. 1	
Typewriter, Non-P., Elite Type.....	Ea. 4	
Typewriter, Portable, Elite Type.....	Ea. 1	
Whistle, Thunderer.....	Ea. 6	
Kit, Sewing.....	Ea. 25	
Unit, Water Heating.....	Ea. 3	

NOTES

*1 Maximum allowance, 1 per E.M. when authorized by C.O.

*2 Maximum allowance, 1 per individual when authorized by C.O.

*3 Maximum allowance, 1 per male individual when authorized by C.O.

*4 Maximum allowance, 1 per individual in Engineer Corps when authorized by C.O.

*5 Issued only when authorized by T of Opens. Comdr.

*6 Maximum allowance, 4 per individual when authorized. No additional blankets to be issued until 1 comforter has been issued unless otherwise authorized by T of Ops. Comdr.

*7 Due consideration should be given to location where units are to serve and season of the year.

*8 Until exhausted.

*9 Authorized for issue within the areas indicated below, to E.M. while performing guard or sentry duty, or regularly assigned as truck drivers, motorcyclists and chauffeurs of vehicles not equipped with enclosed cabs or the equivalent.

Service Commands:

First —Entire Service Command.

Second —Entire Service Command except Delaware.

Third —Entire Service Command except Maryland and Virginia.

Fifth —Ohio and Indiana only.

Sixth —Entire Service Command.

Seventh—Entire Service Command except Arizona, California, and those parts of Washington and Oregon west of the Cascade Range.

*10 Issued only when authorized by C.O. in locations indicated below:

Service Commands:

First —Entire Service Command.

Second —Entire Service Command except Delaware.

Third —Entire Service Command except Maryland and Virginia.

Fifth —Ohio and Indiana only.

Sixth —Entire Service Command.

Seventh—Entire Service Command except Arizona, California, and those parts of Washington and Oregon west of the Cascade Range.

*11 Authorized for issue to individuals in continental U. S. on authority of C.O.'s in the following locations:

Service Commands:

First —Entire Service Command.

Second —Entire Service Command.

Third —Entire Service Command except Maryland and Virginia.

Fifth —Ohio and Indiana only.

Sixth —Entire Service Command.

Seventh—Entire Service Command.

Ninth —Entire Service Command except the following: Arizona, California, and those portions of Oregon and Washington west of the Cascade Range.

*12 Not to exceed two pairs; may be wool as directed by C.O.

*13 To be stored in nearest available depot for issue as determined by T of Ops. Comdr.

See WD Cir. 74, for items issued at Reception centers.

APPENDIX H

SUGGESTED FORM FOR LAUNDRY LUBRICATION RECORD

MONTH OF.....

	1st Week	2nd Week	3rd Week	4th Week
Washer Trunnion Bearings				
Washer Drive Motor				
Washer End Gears				
Washer Gear Shaft				
Extractor Motor Bearings				
Extractor Spindle Bearings				
Extractor Cover Bearings				
Extractor Brake Pedal.				
Tumbler No. 1, Drive Motor				
Tumbler No. 2, Drive Motor				
Tumbler No. 1, Gear Box				
Tumbler No. 2, Gear Box				
Tumbler No. 1, Gear Bearings				
Tumbler No. 2, Gear Bearings				
Tumbler No. 1, Main Bearing				
Tumbler No. 2, Main Bearing				
Boiler Feed Pump				
Condensate Pump				
Fuel Pump Motor				
Crankcase, Diesel				
Crankcase, Gas Engine				

Remarks:

APPENDIX I

CHECK LISTS FOR FOREIGN DUTY

PART I

FOR ALL MILITARY PERSONNEL ORDERED TO FOREIGN DUTY

The following tabulation is a reprint of WD Cir. 333, 1942, as amended by WD Cir. 361, 1942. All personnel of the quartermaster laundry company, semimobile, should be provided with a similar list. If the outlined procedure is followed the company will have little if any trouble in getting established at their new station. As far as possible all company personnel will be processed at the home station before departing therefrom.

a. Administrative Items:

- 1.** Officers should have their identification card (WD AGO Form No. 65-1) complete with photograph, fingerprints, signature and official authentication.
- 2.** At the port of embarkation identification tags should be obtained and should show:
Full Name
Serial number
Name and address of the person to be notified in case of emergency
Date of tetanus inoculation
Blood type
Religion (if desired)
- 3.** Desirability of delegating power of attorney should be considered. Power of attorney may be "general" for any use but cashing Government checks, or "special" for use only in cashing Government checks.
- 4.** Officers going overseas should make a will.
- 5.** National Guard and Reserve officers should obtain statement of service.
- 6.** Four copies and ten extract copies of orders should be obtained.
- 7.** Investigation should be made to determine whether or not a passport will be necessary and if so the passport should be obtained and completed with all necessary visas.
- 8.** Seven extra copies of the passport photograph should be obtained.

- 9.** Information booklets concerning the country or countries which will be visited should be obtained.
- 10.** WD AGO Form No. 41, Designation or Change in Address of Beneficiary, should be completed.
- 11.** WD AGO Form No. 43, Emergency Addressee and Personal Property Card, should be completed.
- 12.** The correct APO number should be determined.
- 13.** Check with official directives to determine whether or not you have all items of clothing and equipment prescribed.
- 14.** If the trip will involve air travel, investigation should be made to determine whether or not the necessary priority has been arranged.

b. Financial Matters:

- 1.** Desirability of making allotments of pay to cover war risk insurance, national service life insurance, commercial insurance, dependents, etc.
- 2.** Desirability of making pay reservation for war bonds.
- 3.** If any allowances such as uniform allowance, mileage allowance, or per diem are due or will accrue before embarkation, steps should be inaugurated to complete the necessary vouchers and substantiating documents in order to obtain payment.
- 4.** A rental certificate showing nonassignment or termination of quarters at last station may be necessary.
- 5.** Investigation should be made to determine that the pay data card is up to date, showing current pay, allowances and deductions.

c. Medical Matters:

- 1.** The immunization register should show one smallpox vaccination and three typhoid-paratyphoid injections, which must have been accomplished within 12 months prior to departure. In addition, the register should show three tetanus injections, or one injection only if initial or stimulating injections were administered more than 6 months before departure. Also, when so ordered the register should show one yellow fever, two cholera, and three typhus injections.
- 2.** Blood type should be determined and shown on the immunization record and identification tags.

3. A thorough dental inspection should be made and any deficiencies noted should be immediately taken care of.
4. If eyeglasses are worn, an extra pair should be obtained.
5. A physical examination should be taken at the home station, and if more than 48 hours elapse before reaching the port of embarkation, an additional examination should be made there.

APPENDIX I

CHECK LISTS FOR FOREIGN DUTY

PART II

OFFICERS' UNIFORM AND EQUIPMENT FOR OVERSEAS

The following information is provided by the Transportation Corps Travel Office:

a. Baggage. 1. Officers traveling with troops: baggage limited to one foot locker, one bedding roll, total, 175 lbs. in hold of ship—an additional 50-lb. bag may be carried in stateroom.

2. Officers traveling individually by water: same as above.

3. Officers traveling by air: limited to 77 pounds (55 pounds to British Isles). In addition, the remainder of the traveler's baggage up to 175 pounds may be shipped by water. An officer going all the way by water may take his full baggage allowance with him. If it is expected that he will travel any portion of the way by air, the 77- (or 55) pound limit must be observed.

b. Clothing*. Below is a list of clothing it is suggested every officer have when going on foreign duty. For certain countries additional clothing will be necessary, due to climate. Certain items will vary according to assignment. An officer assigned to a headquarters in London, for example, would require more than one coat, whereas an officer assigned to a combat unit might get along with one.

1. Basic Articles.

1 cap, service, wool	8 undershirts
1 cap, garrison, wool (overseas)	12 pairs socks, cotton, tan

*Note: The summer uniform has not been authorized for use in England. Extra clothing for Arctic regions may be obtained from the quartermaster at Port of Embarkation. Officers should not draw Arctic clothing unless ordered to do so.

2 caps, cotton, khaki (overseas)	1 pair shoes, service, high
1 coat, wool, elastique	2 pairs shoes, low
2 pairs slacks, wool (1 pink, 1 dark)	1 pair slippers
1 pair slacks, wool (enlisted od)	4 shirts, cotton, heavy khaki
2 shirts, field, wool	4 shirts, cotton, light khaki
4 pairs slacks, cotton, khaki	4 wool tan ties
1 short coat (preferable to overcoat)	4 cotton tan ties
1 field jacket	24 handkerchiefs
1 pair leggings, canvas	1 set toilet articles
2 complete extra sets of insignia	2 pairs garters
1 belt, waist, khaki	1 cigarette lighter (Important: Matches are almost unobtainable)
8 pairs shorts, underwear	6 bars of soap and supply of towels
2 cans lighter fluid (can not be taken by air travel)	

2. Extra clothing for Iran, Iraq, Egypt, North Africa, India and Australia.

1 coat	3 shirts, cotton, short sleeves, khaki (for use with khaki shorts)
1 pair slacks, tropical worsted This is merely suggested, since coats are worn by the British after working hours.	3 pairs socks, wool, long (for use with khaki shorts)
3 pairs shorts, cotton, khaki (buy them here, they are hard to get overseas)	1 sun helmet
	1 pair sun glasses, best quality

3. Extra clothing for Arctic regions.

1 hat, rubberized	1 shoe pacs, 16 inch, rubberized bottom, leather top
1 overcoat, parka type	1 parka, double texture, rubberized
1 sweater, worsted, turtle neck	1 jacket, field, arctic
2 undershirts, wool knit, arctic	1 sweater, sleeveless
1 pair trousers, jersey lined	2 pairs drawers, wool, knit, arctic
4 pairs socks, wool, arctic	1 pair trousers, double texture, rubberized
1 pair gloves, wool, od, arctic	1 toque, face
1 pair mittens, horsehide, lambskin lined	1 pair goggles, polarized

c. Equipment.

QUARTERMASTER

1 (NS) 74H Helmet, Bodies (MI)	2 27-B678 Blankets, wool, od
1 (NS) 74-L Liner, Helmet (MI)	1 74-C-62 Can, meat (M-1932)
1 (NS) 74-H Headband, Helmet (MI)	1 74-C-80 Canteen (M-1910)
1 (NS) 74-N Neckband, Helmet (MI)	1 74-C-300 Cover, canteen
1 74-B-53 Bag, canvas	1 74-C-354 Cup, canteen (M-1910)

1 74-B-265 Belt, pistol	2 74-T-100 Tent, shelter, half
1 74-K-60 Knife (M-1926)	1 74-S-389 Suspenders, belt (M-1936)
1 74-P-260 Pouch, first aid, packet	2 74-L-70 Line, tent, shelter half
1 24-R-110 Roll, bedding, waterproof	1 74-F-63 Fork (M-1926)
1 74-S-312 Spoon (M-1926)	1 74-P Packet
2 74-P-225 Poles, tent, shelter, half	1 37-M-1505 Mask, gas, diaphragm
10 74-P-125 Pins, tent, shelter, wood	

d. Financial Arrangements. As adequate facilities are available abroad for conversion of United States currency to foreign exchange, and in order to avoid violation of secrecy on sailings, individuals receiving orders directing their transfer to destinations outside the continental United States will not obtain foreign exchange prior to embarkation—Circular No. 222, July 10, 1942.

e. Personal Funds. 1. Personal funds may be carried in one or more of the following ways:

- (a) Letter of credit from bank.
- (b) Currency—\$1—\$5—\$10 notes.
- (c) Travelers' checks.

2. It is recommended that allotments be arranged so that a large surplus of cash will not accumulate overseas. A cash reserve on hand should never be more than \$250.00.

f. Passport. All military personnel traveling overseas, excepting those traveling with troops on a transport, will be required to have passports which have been visaed for the countries en route to final destination. Passport photographs must be obtained. In Washington, the Transportation Corps Travel Office will make arrangements. Outside of Washington, application should be made to nearest Federal Court clerk. Birth certificates are not required for officers. Passport should be kept on person at all times, not in luggage.

g. Travel of Dependents. When new permanent station is located outside the continental limits of the United States, dependents of an officer may travel at government expense to any place in the United States selected by the officer as their permanent home. (Only 1 movement allowed after September 1, 1942.)

APPENDIX J

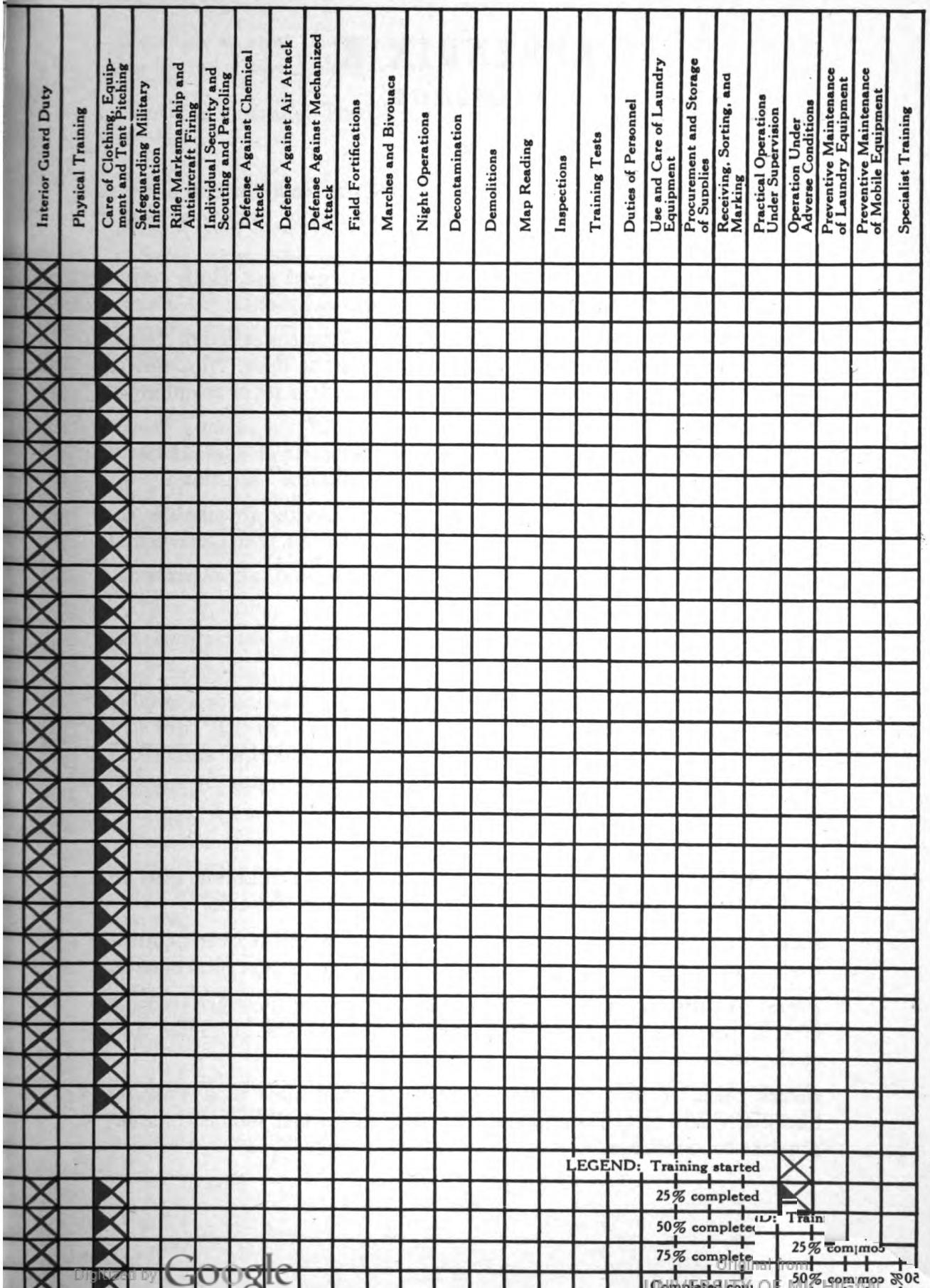
TRAINING PROGRESS CHART

NAME AND RANK	ASN	PRIMARY DUTY	SECONDARY DUTY	QUALIFICATIONS FOR NEXT HIGHER GRADE	Articles of War	Organization of the Army	Military Discipline, Customs and Courtesies	Military Sanitation and Sex Hygiene; Personal Hygiene	First Aid	Infantry Drill (Close Order)	Extended Order Drill
COMPANY HEADQUARTERS											
M/Sgt. A. B. Abercrombie	12345678	Superintendent									
1st Sgt. C. D. Billingsley	23456789	Administrative Assistant									
T/Sgt. E. E. Cottingham	34567891	Mechanic Foreman									
S/Sgt. G. H. Ditherley	45678912	Mess Sergeant (Par. 47, MTP 10-1)									
S/Sgt. I. J. Ellis	56789123	Operating Supply Sgt.									
S/Sgt. K. L. Frothingham	67891234	Unit Supply Sergeant									
T/4th O. P. Hemingway	78912345	Cook (Par. 48, MTP 10-1)									
T/4th Q. R. Izvovsky	89123456	Cook (Par. 48, MTP 10-1)									
T/4th S. T. Jones	91234567	Cook (Par. 48, MTP 10-1)									
T/4th U. V. Katzscinsky	10101010	General Electrician (Par. 38, MTP 10-1)									
T/4th W. X. Leffingwell	20202020	General Machinist (Par. 28, MTP 10-1)									
T/4th Y. Z. Middleton	30303030	Automobile Mechanic (Par. 31, MTP 10-1)									
T/4th A. C. Noonan	40404040	Sheet Metal Worker (Par. 29, MTP 10-1)									
Cpl. M. N. Gildersleeve	50505050	Company Clerk (Par. 35, MTP 10-1)									
T/5th A. D. O'Brien	60606060	Record Clerk (Par. 35, MTP 10-1)									
T/5th A. E. Pedersen	70707070	Cook (Par. 48, MTP 10-1)									
T/5th A. F. Quincy	80808080	Cook (Par. 48, MTP 10-1)									
T/5th A. G. Ritchey	90909090	Automobile Mechanic (Par. 31, MTP 10-1)									
PFC A. H. Smith	11111111	Chauffeur (Par. 30, MTP 10-1)									
PFC A. I. Taliaferro	12121212	Chauffeur (Par. 30, MTP 10-1)									
PFC A. J. Upshur	13131313	Cook's Helper									
PFC A. K. Woolfender	14141414	Cook's Helper									
PFC A. L. Xerxes	15151515	Orderly									
Pvt. A. M. Yeshushian	16161616	Cook's Helper									
Pvt. A. N. Zwerner	17171717	Cook's Helper									
Pvt. A. O. Adams	18181818	Basic									
Pvt. A. P. Buffinton	19191919	Basic									
FIRST PLATOON											
John Roe, 1st Lieut., QMC Commanding											
T/Sgt. A. Q. Cadwallader	21212121	Laundry Foreman									
S/Sgt. A. R. Dunn	22222222	Ass't Laundry Foreman									
S/Sgt. A. S. Evanovich	23232323	Ass't Laundry Foreman									
S/Sgt. A. T. Finkenstein		Ass't Mechanic Foreman									

QUARTERMASTER LAUNDRY COMPANY, SEMIMOBILE

John Doe, Captain, Q. M. C.,

Commanding



APPENDIX K

GLOSSARY

A

Acid. A chemical substance having characteristic reactions and always containing hydrogen in its composition. Commonly known as sour. (See sour.)

Active Alkali. Alkali which is available for detergent use. Both active and inactive alkali may be present in the same solution.

Albumin. One of a group of complex organic substances called proteins, which largely make up the non-fatty portions of flesh. Albumin is found in all body excretions, such as perspiration. It is set or coagulated, and made insoluble in hot water.

Alkali. A substance which is chemically the opposite of acid. It has a distinctive reaction with water, forming an "alkaline" solution.

Alkaline—Detergent. A water soluble product, having an alkaline reaction and detergent qualities, but containing no soap. (See Detergent.)

Anhydrous Soap—Pure soap, free from water and all other concomitants.

Assembling. Bringing together, after washing and extracting, the various classifications in the bundle.

Available. In a chemical sense, reactive. Available chlorine or available alkali means these materials in an uncombined form so that they will do chemical work. It is possible to have both chlorine and alkali present in solution in such form that they will do no work chemically.

B

Base. A chemical substance (hydrozide) capable of combining with an acid to form water and a salt of both the base and the acid.

Bicarbonate. A chemical substance in which an alkali is over neutralized or saturated with carbonic acid. Modified soda is part bicarbonate.

Bleach. A substance which whitens. Common among these are chlorine bleach, peroxides, and reducing agents, such as the sulphites and oxalic acid.

Bleach Suds. A suds operation, usually the last suds in a washing formula, where bleach is applied. Bleaching in the last suds is common practice to save time.

Bleaching in clear. A rinse operation, usually the first rinse in a washing formula, where bleach is applied.

Bleaching Intensity. The degree of oxidation brought about by the use of bleach.

Bleed. Spreading of loosened color into another section of the fabric.

Blue. A color blend of selected dyestuffs used to neutralize or mask the natural undesirable yellow tint of textile fabrics.

Break (Breakdown). A preliminary or starting bath of a washing formula, designed to wet down, loosen, and remove as much of the surface soiling as possible. It is now replaced by the first suds in modern formula.

Break Compound. Any detergent compound used in the initial operation of a washing formula; for example, soda.

Budget credit items. The practice of issuing these items on a budget credit basis has been discontinued. These materials, mostly expendable supplies used in the care and maintenance of property, are issued in accordance with allowances prescribed in OQMC Cir. 1-18, Feb. 16, 1942.

Build Soap. A mixture of soap and one or more alkaline detergents, and containing not more than 50 per cent anhydrous soap.

Builder. Any substance added to soap to increase its efficiency under the conditions in which it is being used.

Building. The use of an alkali to raise the detergent efficiency of a soap solution. An ordinary soap solution does not have all the necessary properties of an ideal cleanser, and is not hardy enough to stand the temperatures and mechanical action of washing. To reinforce soap, alkali in one form or another, and in varying proportions, is used with the soap.

C

Cadre. A skeleton or nucleus of officers and enlisted men upon which a regiment or other organization is formed. The officers of the regiment form the staff.

Cascade Washer. A laundry wash-wheel built on the cascade principle which provides for a continuous rolling lift and drop of the goods with a waterfall, or cascade-like effect of the detergent bath.

Caustic. The hydroxide or hydrate type of alkali, commonly known as caustic soda or lye. When used as a builder, this alkali is destructive and discoloring to cotton. This type of alkali is very difficult to rinse.

Chlorine. An elemental gas known chemically as halogen. Being an important releaser of oxygen from water, it plays an important part in bleaching operations and compositions.

Chlorine (Available). The chlorine equivalent of the oxygen available for oxidation or bleaching. This is a misleading term used to evaluate the oxidizing power of hypochlorite bleach.

Civilian occupational specialist. Given a number below 500 for classification purposes. Such a man may be given a military assignment carrying the same specification serial number in the army. For instance the civilian occupational number for a cook is 060 and the military number for the occupation is the same.

Classification (Goods). Separation of goods according to soil and resistance of fabric to chemical attack, and color fading.

Concentration. The strength of a certain solution. This may be in terms of percentage or grains per gallon, for instance.

Controlled items. As distinguished from credit items. The allotment of controlled items is regulated by higher authority according to the availability of such equipment and priorities on it. Vehicles and trailers are controlled items.

Crock. The discoloring or dyeing effect on light-colored cloths as the result of the running of dye from darker materials not fast dyed.

Custodial officer. Functions as custodian for post property for which he receipts and assumes joint responsibility with the company commander as provided in WD Cir. 405, 1942.

D

Decompose. To break up into component parts by heat, or chemical action. Example: Heat decomposes bicarbonate to form soda ash, and frees carbonic acid.

Detergent. Any material which aids in washing. Example: Any alkali, or any soap.

Detergent Soap Powder. A mixture of soap and one or more alkaline detergents, and containing 25 to 50 percent of anhydrous soap.

E

Echelon system of maintenance. Set up in five echelons of depth.

1. First—Preventive or driver maintenance.
2. Second—Together with first comprises organizational maintenance. Usually performed by organizational mechanics with the T/BA tools issued to the unit and confined to making of minor repairs and servicing.
3. Third—Medium maintenance performed by maintenance organizations and consisting of minor repairs and unit replacements.
4. Fourth—Heavy maintenance performed by heavy maintenance companies set up to make major repairs and to reclaim vehicles and unit assemblies.
5. Fifth—Maintenance performed by base shops in which the ability to repair and reclaim is not limited by lack of facilities or by restrictions imposed because of mobility considerations.

Equivalent. Equal in one or more respects.

Expendable property. Consists of such articles as powder, subsistence, and cleaning and preserving materials which lose their identity as the result of being consumed or incorporated in a larger item, as parts placed in vehicle. Expendable property is opposed to nonexpendable property which is worn and does not lose its identity.

Extractor. A machine used to remove water from fabrics by centrifugal force.

F

Fast. Descriptive of dyes which will not fade or change shade by exposure to sunlight, washing processes, perspiration, etc.

Felting. A shrinking action, principally observed in the wood fibre, which results in a more dense and compact fibre.

Formula. The complete schedule of application of detergents, and other supplies, in laundering.

Free Alkali. Alkali which is chemically uncombined: in other words, caustic soda or caustic potash, which are not united with any neutralizing substance. A destructive form of alkali.

Fugitive. This has reference to colors which are uncertain, and tend to bleed, or run, in the washing process.

H

Handle. The feel of the goods, such as "raggy," "harsh," or "boardy."

Hardness. Expresses the presence of dissolved minerals in water. Soap destruction is characteristic of hard water.

Hypochlorite (Soda). A solution of a chemical derived from hypochlorous acid and a sodium base, commonly termed soda-bleach. This is prepared in various ways.

I

Indicator. A chemical which shows by a change in color the progress or termination of a certain reaction. Examples: Hethly orange, phenolphthalein, and others.

Individual clothing and equipment. Items chargeable to enlisted men on individual clothing and equipment records and normally taken with the man on change of station.

J

Javell Water. Common term for a type of bleach solution.

K

Kick-off. To empty a wash-wheel after an operation by opening the dump valve.

L

Level. The height of the water inside the cylinder of the wash-wheel when the machine is loaded and in motion.

Lime. Calcium oxide or hydroxide.

Lime, Chloride of. Ordinary chloride of lime bleach, or calcium-hypochlorite.

Lime Soap. An insoluble soap produced when lime replaces the soda in a soap composition. A very troublesome by-product in detergent processes.

M

Machine records unit. An integral part of Army personnel administration established at service command headquarters and other points authorized by the War Department. Data supplied to these units on WD AGO Forms Nos. 303 and 309 are mechanically processed to produce rosters, strength returns, historical records and other information on request.

Mechanical Action. The combined flexing, abrasive, and compressive detergent effect produced by a running wash-wheel.

Military occupational specialist. Given a specification number above 500 for men qualified in military capacities and so assigned.

Modified Soda. A mixture of soda-ash and sodium bicarbonate low in active alkali and efficiency.

Moisture content. The amount of water which any substance contains.

N

Neutral. Neither acid nor alkaline.

Neutral Soap. Commercially pure soap containing less than one tenth of one per cent alkali calculated as sodium hydroxide.

O

Odor. An unusual off-odor, usually unpleasant, in goods after laundering. May be due to mold growth (mildew), decomposed soap, certain sours, and other causes.

Olein. The solid precipitate which settles out of vegetable and animal oils upon cooling. Sometimes this term is applied to oleic acid, or Red-Oil.

Organic. A broad term applied to substances obtained from living organisms. These substances consist largely of hydrogen, carbon, and oxygen. Opposed to this class of substances are the mineral or inorganic substances.

Organizational clothing and equipment. Table of Basic Allowances property, a record of which is required to be kept in the company property book. Regardless of personnel turnover and changes of locale this property is maintained at a constant level.

Overload. Loads in excess of the maximum rated capacity of the wash-wheel. The rated capacity is set to give the greatest efficiency of the wash-wheel.

Oxalic Acid. A solid, crystalline, organic acid having good iron solvent properties; a good reducing agent or bleach neutralizer, but is a hard rinser and destructive to the goods, if allowed to remain in them, even in traces.

Oxidize. To add oxygen to any material by chemical reaction. Chlorine bleaching is an oxidizing action.

P

Peroxide. A chemical substance which will release oxygen for bleaching. Hydrogen peroxide is commonly used for bleaching stains and small bleach jobs. Sodium peroxide is used for industrial bleaching.

Personnel center. Consists of clerical personnel assembled from the organizations served for the purpose of cooperative enterprise in order to promote uniformity of personnel administration and accounting. The primary purpose of the "center" or "section," however, is to relieve the company commander of the burden of administrative details.

Personnel Officer. Otherwise the assistant or personnel adjutant. He directs and supervises the personnel section and has the authority to act in the name of the commander.

PH. An expression used to indicate the degree (not quantity) of alkalinity, or acidity, of a solution.

Post property. Those supplies issued for garrison use as listed in Table of Allowances No. 20.

Precipitate. A solid substance separated or thrown down in a liquid. The result of chemical reaction. Example: Precipitation of lime by soda-ash in making bleach.

Pull. To remove the load from the wash-wheel after kicking-off.

R

Reaction. Chemical action between two or more chemicals. Example: Soap plus sour equals fatty acid plus sodium salt of sour.

Reception center. A point where inductees report for processing and assignment. Limited training facilities are provided at such a center to give basic training to men awaiting assignment.

Red-Water. Usually contaminated with iron rust. Brought about through iron pipe corrosion from oxidation of the iron by the oxygen in the water.

Replacement training center. A military establishment in the zone of the interior where men and officers are trained and held as replacements normally for units suffering casualties in combat.

Rinse. To remove by successive additions of fresh water the accumulations of detergent and dirt emulsions, and other materials, which are

formed in the wash-wheel during the washing process. Rinsing is very important in the production of quality laundering, and prevention of fibre damage.

S

Saponification. Splitting of a fatty glyceride by an alkali to form a soap and glycerine.

Soap. Ordinary soap is the alkali salt of a fatty acid. The alkali may be either sodium or potassium and the soap may be made by saponifying a fat or oil or neutralizing the fatty acids obtained from fats or oils. Alkaline earth metals such as calcium, barium, and magnesium form insoluble soaps used in some industries as waterproofing agents for fabrics.

Soap Specks. Either lime soap deposits or the greasy portion of soap produced by decomposition from heat or sour, etc. Very difficult to remove from goods.

Soda. A term generally applied to the alkaline builders, but which is only correctly applied to the modified sodas.

Soda Ash. Sodium carbonate. A moderately strong alkali, yet very destructive to both colors and fabrics. A hard rinser.

Sour. A term used to designate an acid. Probably derived its name from the sour taste that is characteristic of an acid.

Stock record account. The account kept on WD QMC Form No. 424. The officer keeping the record is the accountable officer and is required to be able to show at all times the disposition of property in his custody. Officers of tactical units cannot be vested with accountability.

Suds. An emulsion of air in the solution. In soap solution it is an indication of active soap.

Suspension. The picking up of dirt from a fabric and holding it in the liquid so that it may be discharged. Dust and soot in the atmosphere is also a suspension.

T

Table of Allowances. (See "post property.")

Tables of Basic Allowances. For the quartermaster laundry company, semimobile, these tables are T/BA No. 10 and T/BA No. 21.

Technical inspections of motor vehicles. Opposed to command inspections and include the 30 day (monthly) or 1000 mile maintenance in-

spection and the 90 day (six months) or 6000 mile inspection. The use of WD QMC Form No. 260 is optional.

Temperature. The degree of heat, commonly expressed in laundries by the Fahrenheit scale.

Temporary Hardness. Bicarbonates of lime and magnesium, so named because, under the influence of heat, they are changed to carbonates and precipitated. They are unstable. Temporary hardness may be removed from water by heating it.

U

Unit training center. An establishment where units are formed and train as such preparatory to active field duty.

V

Volatile. A substance easily evaporated.

W

Washing. A process of cleaning in a liquid medium.

Water Consumption (Wash-Wheel Levels). Water consumption means water consumed after saturating the load with water, i. e., the amount of water running *out* of the wheel upon dumping.

Z

Zeolite. A hydrous aluminum-sodium-silicate prepared in porous granules and capable of exchanging its base, sodium, for calcium and magnesium; and also capable of expelling the calcium and magnesium in favor of sodium again by treatment with salt (sodium chloride). The active ingredients in zeolite water-softeners.

Zero Soft Waters. A water free from hardness salts.

STUDENT NOTES

STUDENT NOTES

STUDENT NOTES

STUDENT NOTES

